



University of Colorado
Colorado Springs

Master Plan

September 2012

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Executive Summary

The 2012 Master Plan for the University of Colorado Colorado Springs (UCCS) provides a strategy for meeting projected growth needs and campus capacity in a responsible and sustainable way. This guide to capital improvement projects supports the university's academic mission and strategic plan while identifying opportunities to reinforce campus identity and a sense of place. It incorporates proposals from previous planning efforts, including the 2006 Master Plan and the East Campus Master Plan, into a holistic framework for campus development.

The Master Plan was undertaken concurrently with the development of the UCCS 2020 Strategic Plan, and both plans reinforce shared goals. The strategic plan indicates that enrollment will grow from 9,321 students in 2011 to over 13,000 students by 2020. This growth will largely occur as a result of a significant number of new students attracted from outside the Colorado Springs region.

The Plan specifically focuses on the underdeveloped North Campus and suggests ways to accommodate future growth on North Nevada Avenue nearest to the commercial activity of Colorado Springs, a prominent area of the university. The capacity of the North Campus at full build-out respects the campus character, connects to the rest of the university, and promotes sustainable design.

MASTER PLAN GOALS

Preserve a Sense of Place

The Colorado Springs campus offers uninterrupted, impressive views of Pikes Peak, the Front Range, and Pulpit Rock, which differentiates it from every other university in the state and nation. Respecting this natural beauty and the dramatic topography of the university setting is critical to avoid environmental damage as enrollment grows and campus development expands.

The Master Plan sites buildings to maintain and frame important views. Drainage corridors are respected and enhanced to accommodate stormwater runoff. Where appropriate, large stands of native vegetation are preserved, and native species are reintroduced to developed landscapes. Evidence of archeological remains uncovered during building excavations for new development will also be monitored and documented or preserved as appropriate.

Connect Campus Destinations

The university's setting is distinctive in its linear organization. Like a string of pearls, the campus is distinguished by various activity areas connected by a single pathway. This circulation spine unifies the campus and serves as a community gathering space for students, faculty, staff, and visitors. It unifies the campus, but each campus district has a unique character that will be preserved and strengthened.

The Master Plan suggests ways of building on existing nodes of activity by creating academic and housing "villages" along the spine extension. The pathway maintains a primary pedestrian route, but also allows bicycles and public transit in an area separate from vehicular traffic. In some situations, pedestrian paths are separated from transit and bicycle routes; at other times, their routes run parallel to one another. Where the pedestrian spine runs alongside a campus road, appropriate design ensures that pedestrians feel separated from auto traffic.

Develop the Campus in a Responsible & Sustainable Way

To accommodate 13,000 students on campus, nearly 1,200,000 gross square feet of new academic and student life facilities will be needed. Should enrollment rise to 20,000 students, nearly 2 million gross square feet of new academic and student life facilities will be needed. However, the university is experiencing several trends that may impact future space needs: online courses, higher utilization of classrooms, and increased on-campus housing. These trends may either slow or accelerate the rate of growth needed to reach full build-out capacity.

The Master Plan accommodates these future needs for academic, research, administrative, and housing facilities by suggesting locations for buildings that are well-connected to the Core Campus through transit, bike, and pedestrian connections. To ensure these facilities are integrated with the campus fabric in a sustainable way, the Plan addresses how future development can reflect the principles of smart growth, achieve high performance buildings and landscapes, and take advantage of alternative modes of transportation.

Engage the Public on the North Campus

A mix of uses within walking distance will be considered carefully when developing the North Campus. With a significant portion of campus located within the North Nevada Corridor Urban Renewal Zone, university development can complement commercial and residential development at University Village Colorado and near the Interstate 25 interchange to create a college town district. By providing public university functions along this important corridor, UCCS can take advantage of partnership opportunities and enhance its presence in the cultural life of Colorado Springs.

The Master Plan sites new buildings related to the health sciences, arts, and athletics on the North Campus that will engage the public in the life of the university. These major facilities are described below.

The Lane Center for Academic Health Sciences, a partnership between the university and community health centers, will be approximately 54,000 square feet and house clinic, research, and office space. The Center is envisioned as the first phase of a future Health and Wellness Village. Potential uses in this area of the North Campus include expansion of existing clinical programs, a nursing school, and additional research, office, or new clinical program space.

The Visual and Performing Arts Center will accommodate performance venues, practice rooms, classrooms, offices, and studio and gallery space. This facility could be split

into two buildings devoted to the visual and performing arts or combined into one. By connecting to a shuttle bus stop and the central green aligned with the existing soccer field, a campus gateway will be created along North Nevada Avenue. A series of sculpture gardens, stormwater management ponds, and outdoor art yards will line the path from the North Nevada underpass to a new arena and complement the existing student sculpture installations along North Nevada Avenue in front of University Village Colorado.

As part of a consolidated athletics precinct on the North Campus, a new 4,000-seat arena will house UCCS athletics programs as well as host public events such as UCCS athletics, US Olympic Committee gatherings, and concerts. Its location along North Nevada Avenue offers easy access and makes it a landmark entry to the UCCS campus. A nearby outdoor stadium hosting track and field and soccer events could be used by community organizations and the US Olympic Committee as well.

These transformational projects establish a vibrant UCCS presence on the North Campus, and the transportation and pedestrian spines establish a critical link back to the academic core. As enrollment grows to 13,000 in 2020 and beyond, the identified development sites allow the university to meet new facilities needs while respecting its natural resources and establishing a unique sense of place.

Purpose & Planning Process

UNIVERSITY MISSION AND VISION

The Colorado Revised Statutes state the mission of the university as:

The Colorado Springs campus of the University of Colorado shall be a comprehensive baccalaureate and specialized graduate research university with selective admission standards. The Colorado Springs campus shall offer liberal arts and sciences, business, engineering, health sciences, and teacher preparation undergraduate degree programs, and a selected number of master's and doctoral degree programs.¹

To support this mission, the University of Colorado Colorado Springs Strategic Plan, 2012-2020 has set forth the following vision:

UCCS, a premier comprehensive undergraduate and specialized graduate research university, provides students with academically rigorous and life-enriching experiences in a vibrant university community. We advance knowledge, integrate student learning with the spirit of discovery, and broaden access to higher education for the benefit of southern Colorado, the state, nation and world.

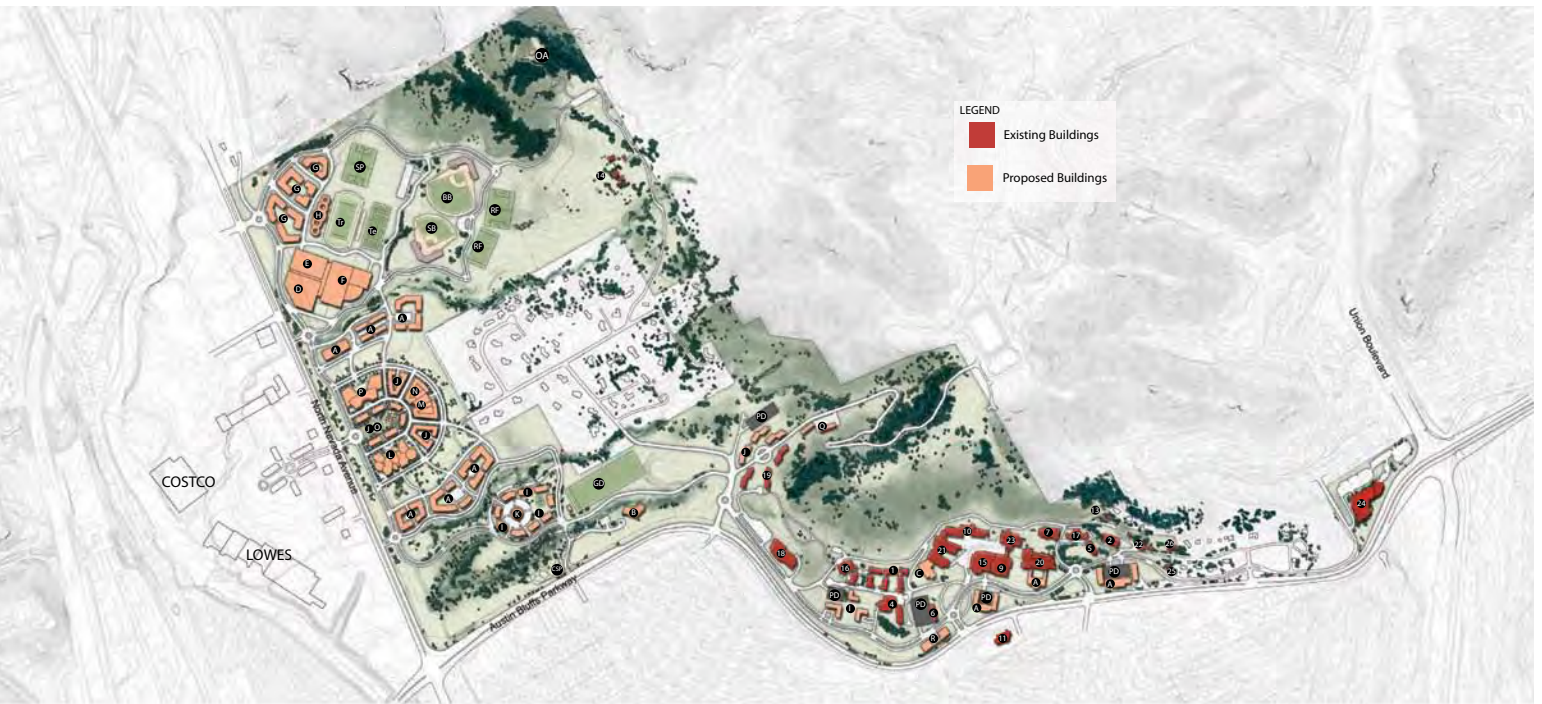
¹ Colorado Revised Statutes. Senate Bill 11-204. Section 2. 23-20-101 (1) (c) Approved June 10, 2011
University of Colorado Colorado Springs Master Plan

PREVIOUS PLANNING STUDIES

The State of Colorado requires that each campus develop a master plan for facilities and land use to support the implementation of the academic mission and guide capital improvement plans. UCCS' existing master plan was submitted in 2006 and includes seven- and fifteen-year plans proposing new development on the Core Campus and North Campus. In light of additional property acquisition to the east of the Core Campus, the University commissioned a Concept Master Plan for the East Campus in 2009.

Several of the proposals from the 2006 plan have been implemented, and others remain valid ideas for future development. However, changing conditions at the university merit some reconsideration of these planning documents, particularly the plan for North Campus.

The findings of the most recent planning effort are documented in this Master Plan, which incorporates proposals from previous planning efforts into a holistic framework for campus development, while focusing specifically on the North Campus at this critical moment in its development.



Fifteen Year Master Plan for University of Colorado Colorado Springs, completed in 2006.



East Campus Concept Master Plan, completed in 2009.

PURPOSE OF THE PLAN

The University of Colorado Colorado Springs (UCCS) has grown steadily since its inception. As the designated growth campus within the CU System, the university is aware that enrollment growth will provide both challenges and opportunities in coming years. The university anticipates that this growth will propel university development onto North Campus, which has long been identified as a critical component of the university's growth strategy.

In light of this context, the Master Plan will:

- Accommodate enrollment growth within a development framework that unifies the campus.
- Evaluate the responsible capacity of North Campus at full build-out and create a plan that respects that capacity in a sustainable manner.
- Integrate university development on North Campus with adjacent development on North Nevada Avenue within the Urban Renewal Zone.
- Develop an implementation plan that aligns with goals set by the university's Strategic Plan for 2020.



The pedestrian spine is an important organizing element in the Core Campus that will inform North Campus development.

CAMPUS COMMUNITY INVOLVEMENT

The campus community participated in the planning process throughout all of its phases. This input took a variety of forms, which are briefly described below. Detailed documentation of participants and meeting schedules is included in the Acknowledgements section.

Master Planning Team

The master planning team facilitated the overall process and was guided by Executive Director of Facilities Services, Gary Reynolds, and Project Manager for the Colorado Springs Urban Renewal Authority, Jim Rees. The team also included representatives from Ayers Saint Gross (master planning), Tapis Associates (landscape architecture), Wilson Associates (civil engineering), and HNTB (arena planning and design). The team used a collaborative workshop model, meeting for two to three days at a time over a period of nine months.

Master Plan Committee

The Committee was comprised of more than 30 individuals representing a range of interests related to the Master Plan. Neighbors, faculty, and staff served as committee members, shepherding the process, vetting and offering ideas, and advising the master planning team. The Committee met with the team at least once during every workshop.

Design Review Board

The Design Review Board for the University of Colorado System reviewed the progress of the master planning process at four intervals during the process. Based on their knowledge of the UCCS campus, the CU System, and the unique challenges of building in the region, the Design Review Board's feedback proved invaluable in shaping the Master Plan.

Focus Groups

Early in the process, the master planning team conducted listening sessions with focus groups representing a cross-section of the university community. During these sessions, the team described the objectives of the master planning process and asked participants to discuss the strengths of the university and its physical campus, specific needs for new or different facilities, and how to meet these needs in a manner that continually improves the quality of the campus.



The Master Plan Committee discussed ideas while walking around campus.



During workshop sessions, the Master Plan Committee explored scenarios.



Public Forum sessions informed the campus community about the plan.



Open House workshops generated ideas about campus organization.



Students, faculty, staff, and neighbors attended the Open House Workshop.

Public Forums

Throughout the planning process, the Master Planning Team held public forum sessions to present their findings and proposals and to listen to concerns and suggestions from those who attended. The meetings were open to all members of the campus community and residents of adjacent neighborhoods were notified of meetings through a mailing sent by a City of Colorado Springs notification system.

Open House Workshop

In November 2011, during the Capacity Studies phase of the planning process, the university held two open house sessions for students, faculty, staff and neighbors to provide input on future campus development. Posters displayed analysis of the campus, planning principles, and initial sketch plans of campus organization at full build-out. Participants had the opportunity to comment on the work displayed as well as to complete a planning activity that explored how new facilities designed to support a 20,000-person student body would be organized on campus. More than 60 students, faculty, and staff attended the open house sessions, providing a wide range of valuable input to the planning process.

PLANNING PHASES

Observations and Concept Plan

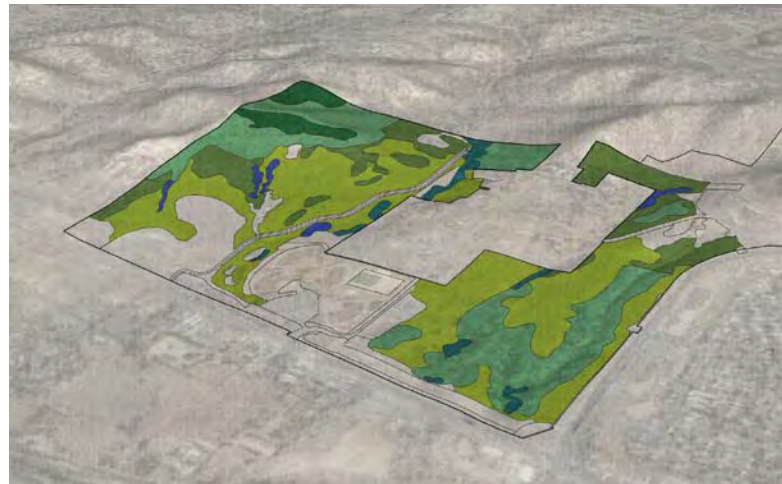
During the first phase of the planning process, the master planning team gathered information about the university through various means. Meetings with students, faculty, and staff provided insight into daily life on campus and the visions the community has for the future of the campus. Analysis of campus organization, specific site issues on the North Campus, and facilities needed to accommodate potential enrollment growth provided context for future development on the site. On-the-ground experiences of the campus community confirmed observations from technical analysis and the themes that emerged coalesced into a concept to guide the process moving forward.

Capacity Studies

During the Capacity Studies phase, the team explored development options for the North, Core, and East Campuses to implement the Concept Plan. Discussion with the campus community resulted in preferred strategies and a better understanding of the number of students the campus can accommodate.

Strategic Plan Integration

Concurrently to the first two phases of the master planning process, the university worked to develop its Strategic Plan. The Strategic Plan set enrollment growth targets and prioritized development projects through 2020. In the final phase of the planning process, the master planning team worked to integrate the preferred long-term development scenarios generated during the Capacity Studies phase with near-term priorities from the Strategic Plan, resulting in the final Master Plan.



Identification of native vegetation in the Observations Phase.



Campus organization scenarios helped evaluate capacity.



Integration with the Strategic Plan informed the final Master Plan.

Campus Setting

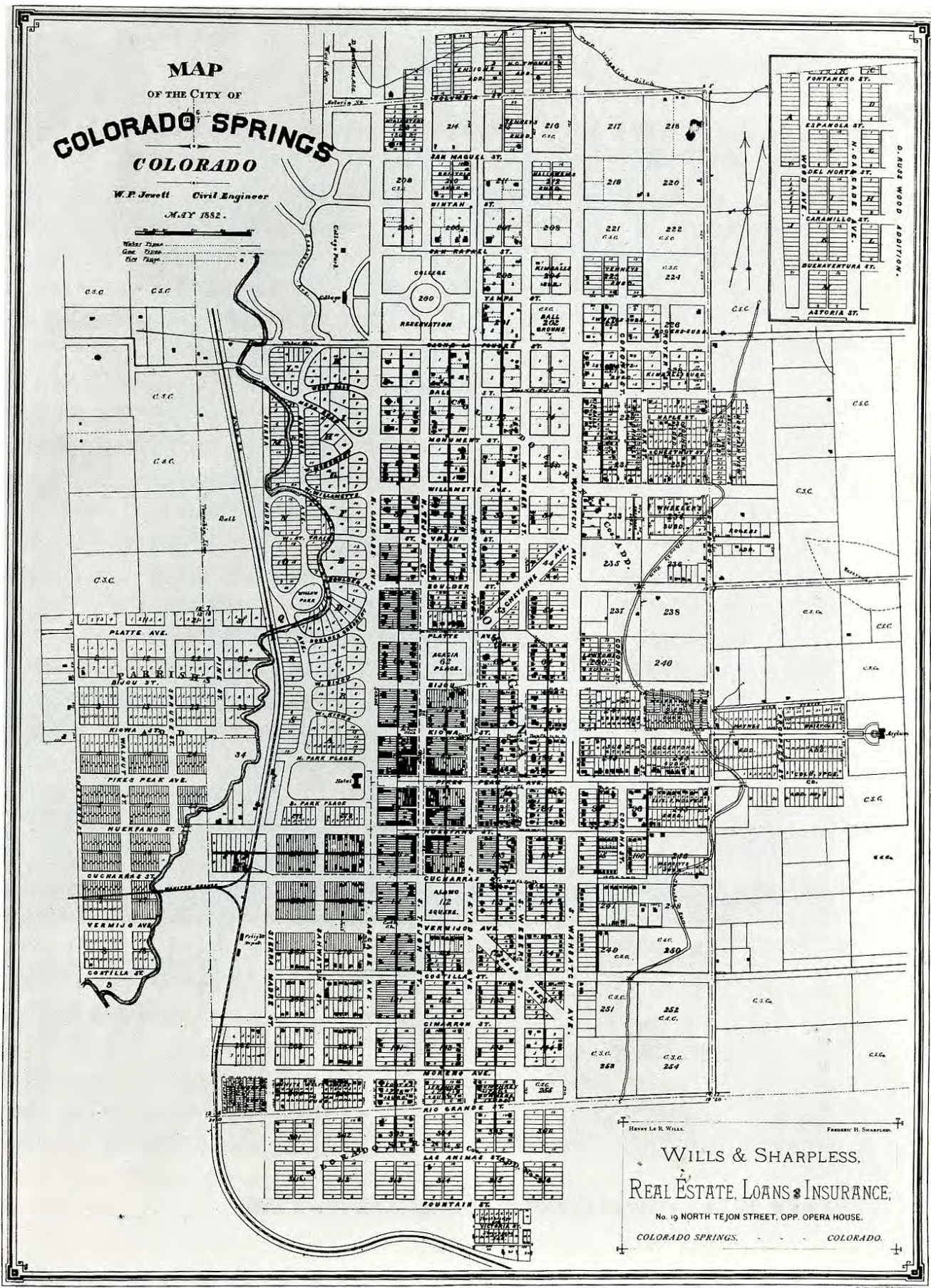
CAMPUS-WIDE ANALYSIS

Colorado Springs and UCCS History

Beginning with the Ute, Cheyenne, Kiowa, and Arapahoe Native American tribes, people have been drawn to Colorado Springs by the iconic peaks and rock formations including Garden of the Gods and Pikes Peak. Small numbers of early American settlers farmed and raised livestock in the area before the Civil War. After the Civil War and in anticipation of a new railroad line, Colorado Springs was founded in 1871. General William Jackson Palmer laid out plans for a gridded city whose main avenue would frame views of Pikes Peak. Land was allocated for schools, parks, and churches in what was envisioned to be a resort town. The city's planning tradition of establishing grid development based on view corridors inspired and informed the Master Plan.



The natural features of Colorado Springs have drawn people for centuries and continue to define campus character.



HENRY LE R. WILLS. FREDERIC H. SHARPLESS.

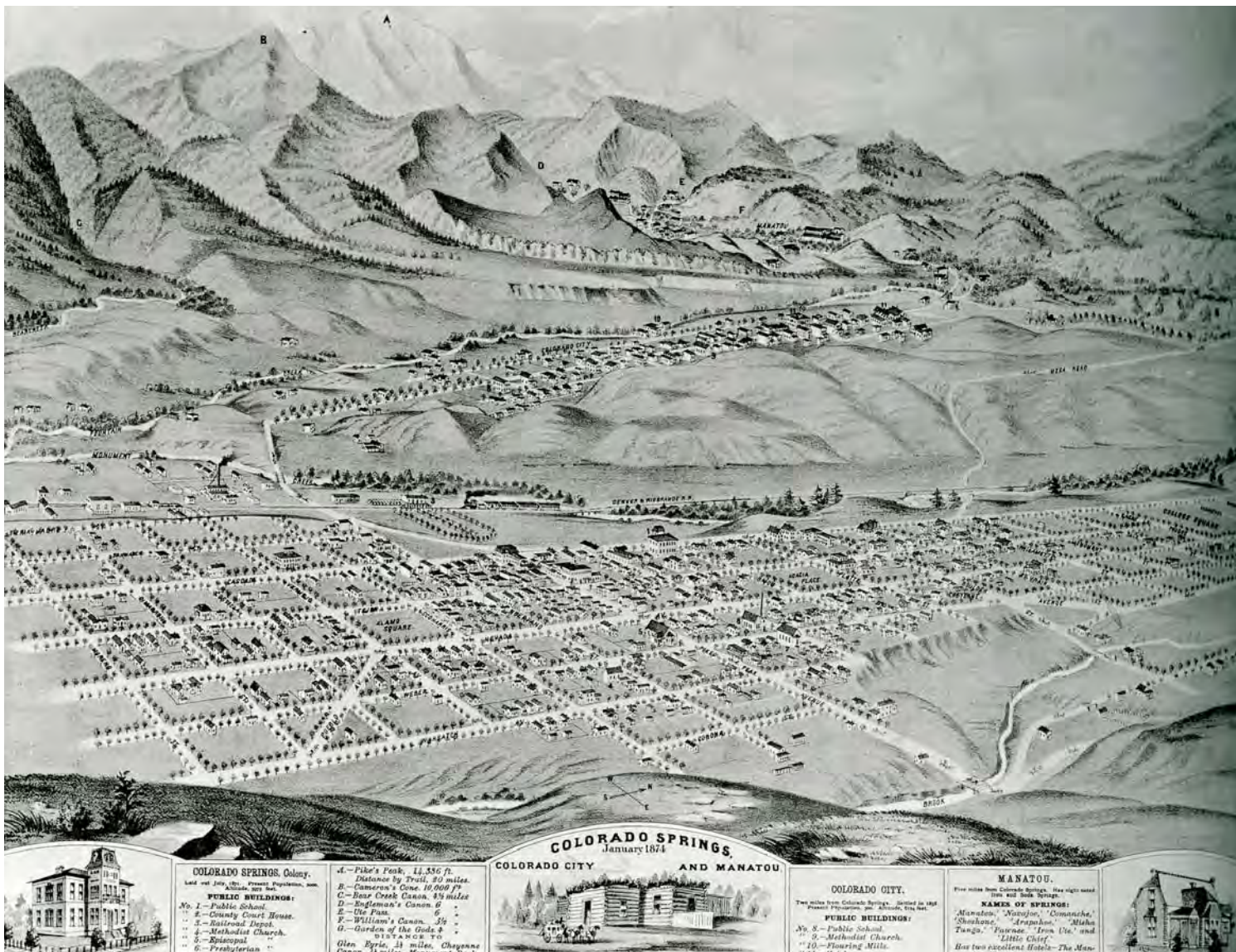
WILLS & SHARPLESS.
REAL ESTATE, LOANS & INSURANCE.
 No. 19 NORTH TEJON STREET, OPP. OPERA HOUSE.
 COLORADO SPRINGS, COLORADO.

1882 Plan of Colorado Springs. Source: Cities of the American West by John W. Reps.

Campus Setting

The city grew rapidly in the 1890s, fueled by the rail line and the gold mining rush at Cripple Creek. The sunny conditions and mild, dry climate also encouraged new residents, particularly because the weather was thought to improve the health of tuberculosis patients. Consequently, the city housed many sanatoriums. One of these sanatoriums, the Cragmor Sanatorium, became the site of the University of Colorado Colorado Springs. Although the CU system had offered courses in the 1920s at informal locations throughout the city, it did not establish a significant presence until the 1960s.

At that time, Hewlett-Packard (HP) wanted to expand operations in Colorado and began negotiations with the local and state governments. The state promised HP a full CU campus in Colorado Springs to support the company's continued expansion, which was realized on the 80 acre Cragmor Sanatorium site. While most of today's Core Campus occupies the original 80 acre parcel, the university has added 365 acres over the last 45 years, for a total of 445 acres. This has mostly occurred through donations of land in support of its mission, including the Heller and Trembly estates, that make up much of the North Campus.



1882 View of Colorado Springs. Source: *Cities of the American West* by John W. Reps.

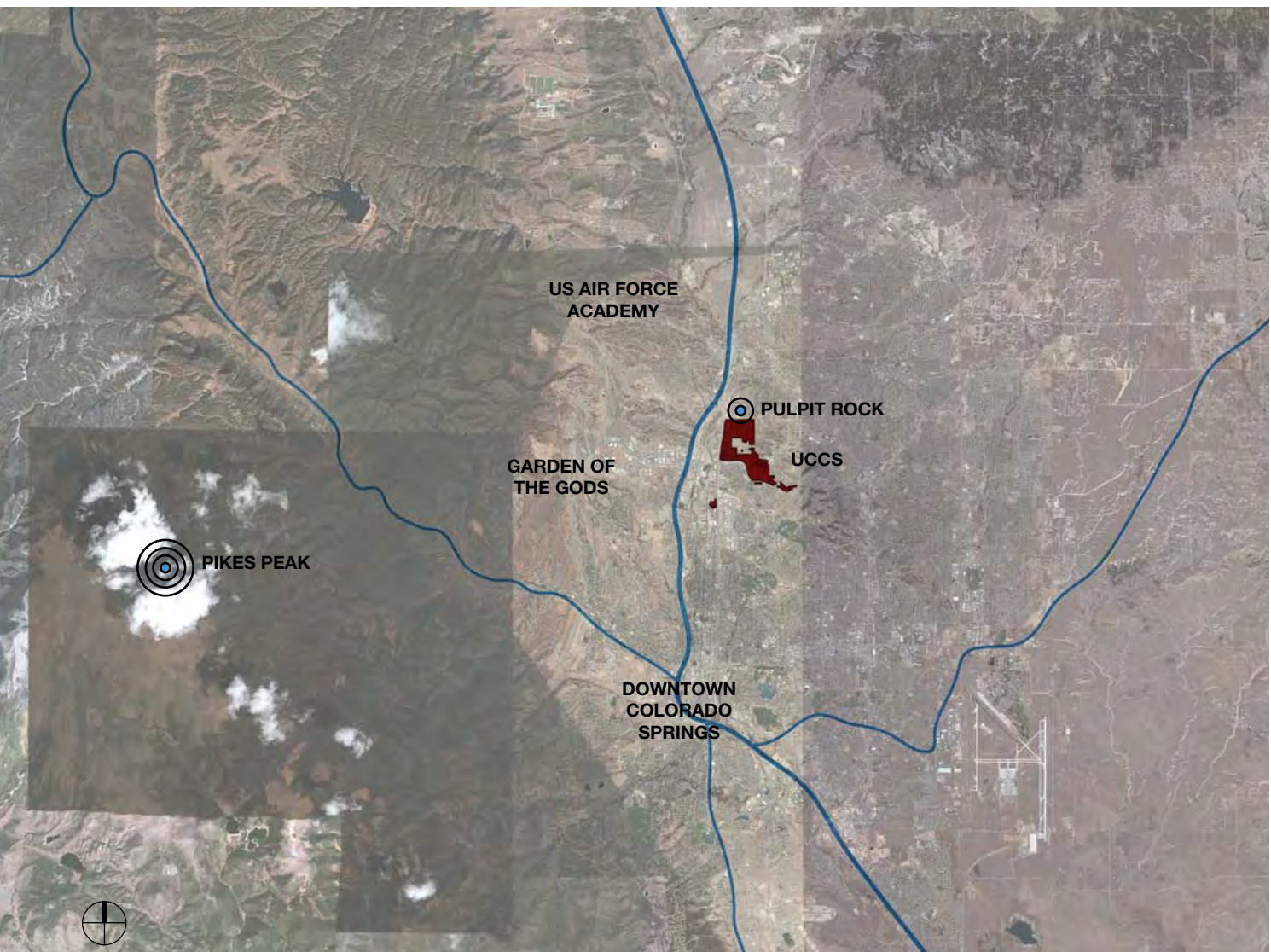
Regional Context

The UCCS campus is located north of downtown Colorado Springs, close to Interstate 25. The campus is bounded by North Nevada Avenue to the west, Austin Bluffs Parkway to the south, and the rock formations of the Austin Bluffs to the north and east.

The Colorado Springs region is home to 650,000 residents, the second largest metropolitan area in the state. Its extensive outdoor recreation opportunities and scenic landscape make it a popular place to live. This is an enormous asset to the university in attracting and retaining students and creating a unique sense of place on campus.

The local economy has long specialized in technology, military, and international sports organizations. The high elevation and dry, sunny climate have attracted the US

Olympic Committee and its Olympic Training Center to the region as well as several military installations. The military presence began with the development of Fort Carson in the 1940s and now includes the United States Air Force Academy, Peterson Air Force Base, Schriever Air Force Base, North American Aerospace Defense Command (NORAD), Air Force Space Command, and the US Northern Command, making the military the region's largest employer. Private sector employment in technology is significant as well due to the cluster of high-tech companies located in the region. These organizations and firms all provide unique partnership opportunities for the university; athletic facilities, for example, could be shared with Olympic training programs to maximize the use.



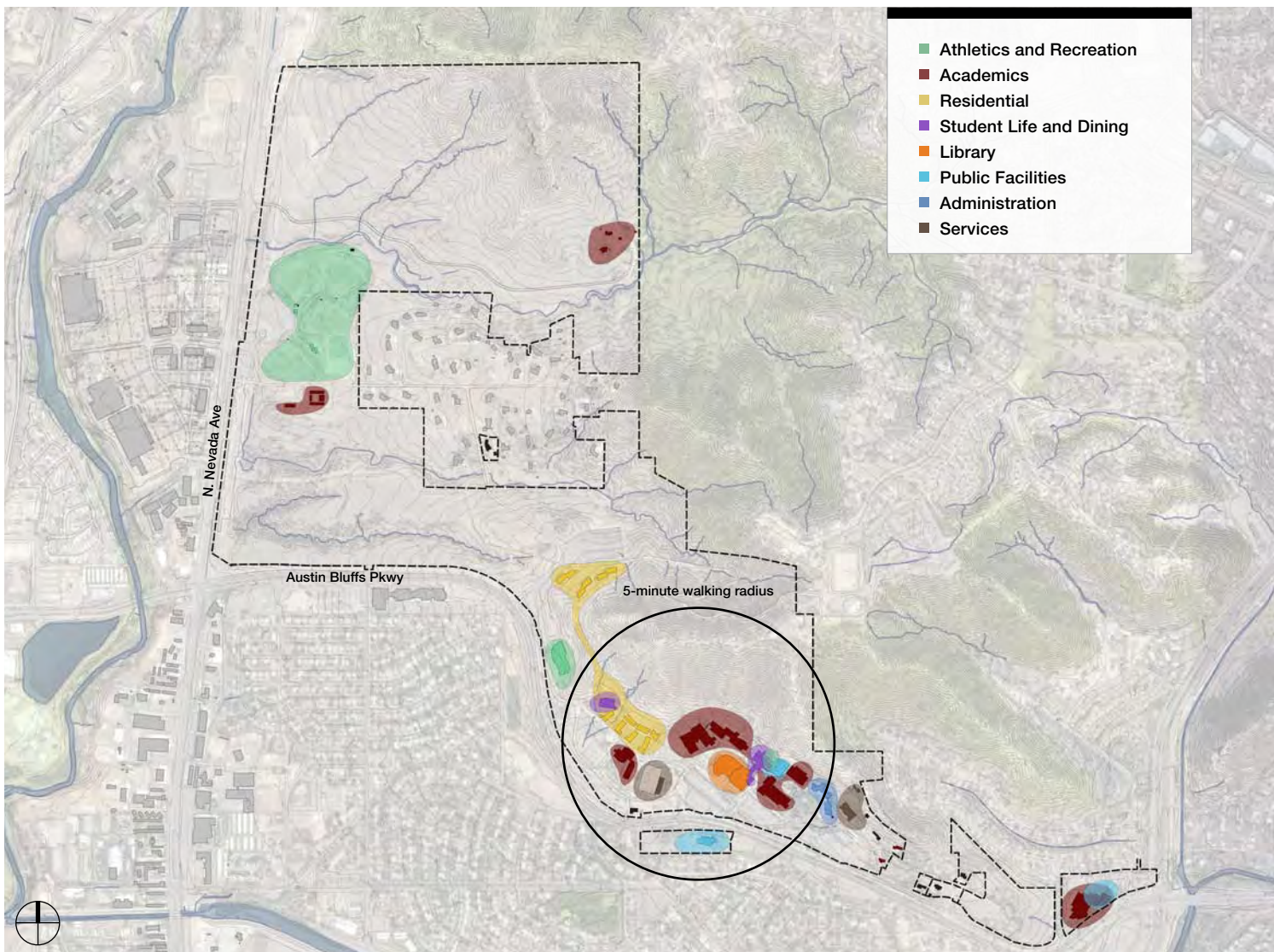
UCCS' location provides natural and economic amenities.

Building & Land Use

Existing campus facilities accommodate 9,321 students in a tight-knit core. The Core Campus mixes academic, research, administrative, athletic, union, and residential facilities. Due to this diverse mix, the half-mile pedestrian spine connecting the Core has become a vibrant place where the university community interacts daily. In this way, the physical campus organization contributes to the feeling that the community is small and personal.

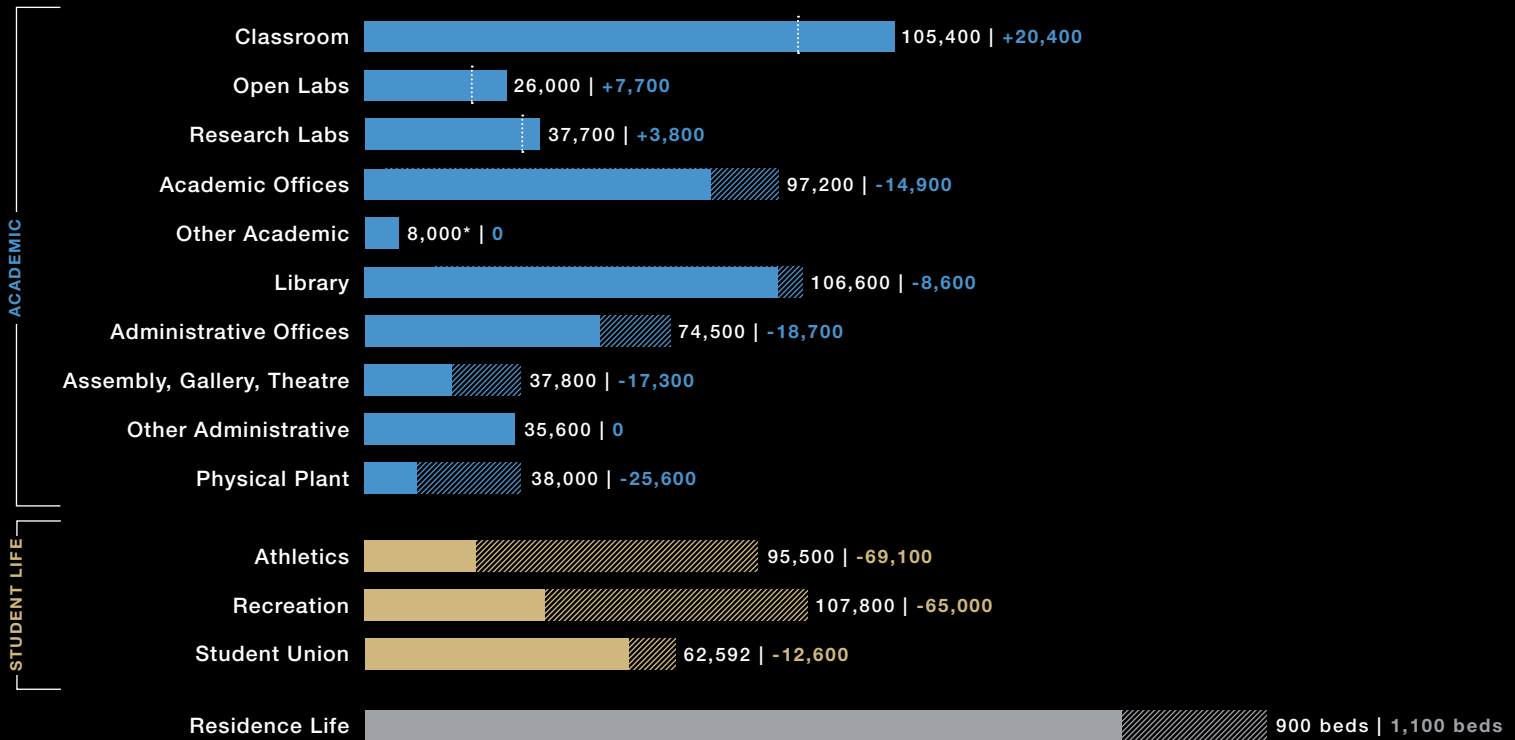
The Four Diamonds Complex and University Hall function as satellite facilities accommodating athletics and recreation fields, ROTC facilities, the nursing and drama programs, and parking. While these facilities are within a ten-minute walk of the Core, the pedestrian connections back to the Core are not well developed and the quality of the walk is not as pleasant as the ten-minute walk through the Core. As a result, these facilities can feel disconnected from university life.

The plan preserves the tight-knit feeling of the community while integrating the North and East Campuses into the campus fabric.



The mix of uses in the Core Campus creates a vibrant campus life.

SPACE NEEDS



Space Utilization

Including all academic and auxiliary facilities, the university currently has over 800,000 square feet of assignable space. This does not include corridors, closets, mechanical rooms, and other non-assignable square footage. Including those spaces, the campus consists of just under 1,800,000 gross square feet of space.

The State of Colorado has established guidelines for the amount of space a university should have per enrolled full-time student. At this broad-brush level, these guidelines are intended to provide an order of magnitude benchmark but do not replace more detailed analysis. They depend on averages and, as a result, only address whether the overall quantity of a space category is correct, not whether the appropriate sizes and types of spaces exist.

According to state guidelines, UCCS is on target for academic space. However, the guidelines show that office space is at a premium, and the university does not have adequate space for the arts, athletics, and recreation. Additionally, spaces to facilitate student life are

notably lacking. These deficits became priorities for the Master Plan.

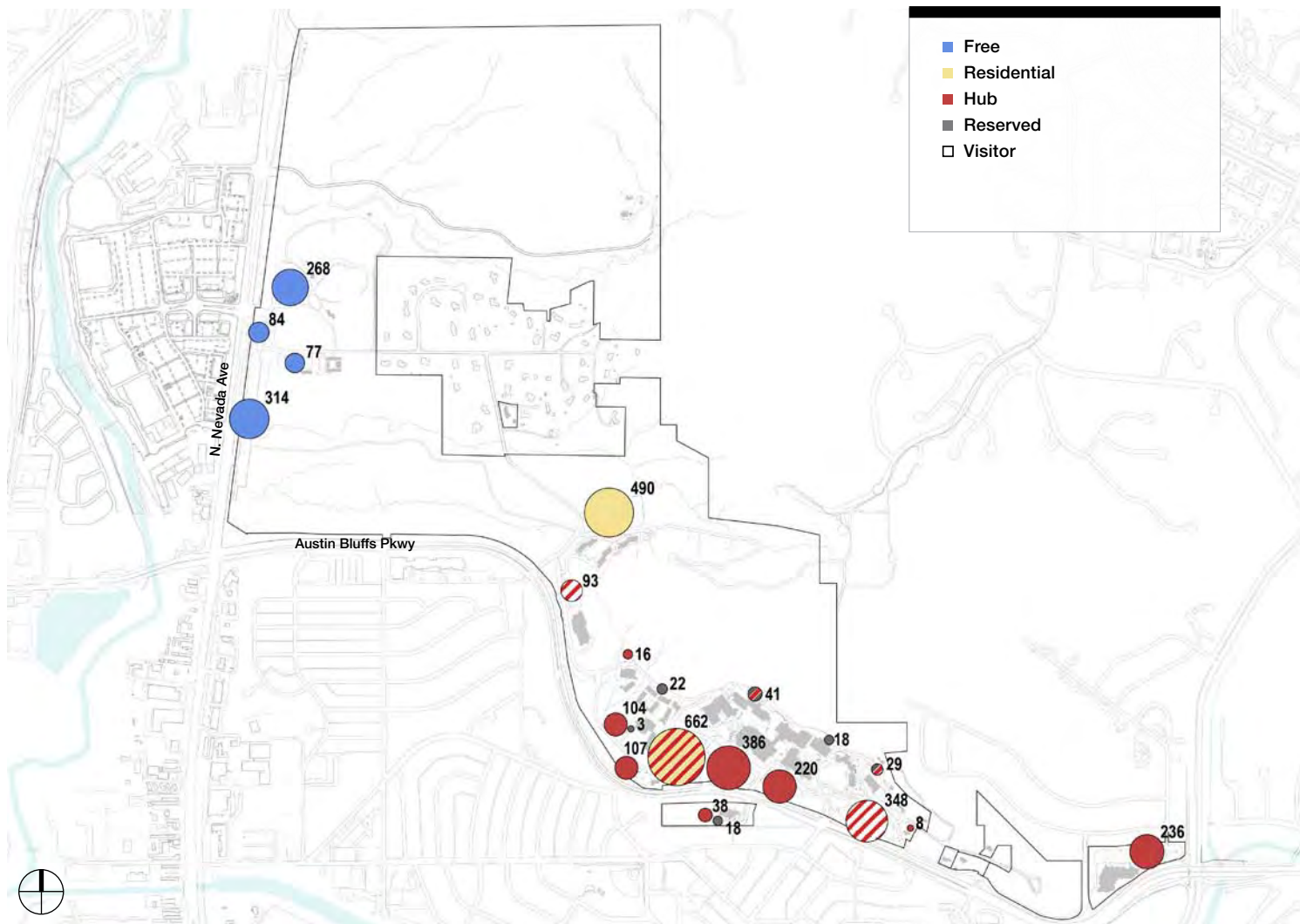
There are no guidelines for the amount of residential space a campus should provide. Supply of on-campus student housing is the result of an interaction between policy decisions about student housing, student demand, and market supply of housing units nearby. Ultimately, on-campus housing significantly impacts the feel of the campus community and research suggests that students who live on campus, even for just one or two years, perform better in the classroom throughout their academic careers. Currently, 900 students, less than ten percent of the student body, are housed on campus. This is markedly lower than schools like Colorado State University – Fort Collins or University of Colorado Boulder, where more than twenty percent of students live on campus. However, UCCS residence halls have been very popular, and a waiting list of over 140 students for Fall 2011 indicates there is unmet demand for on-campus housing. As the university continues to grow, they will continue to increase the percentage of students who live on campus.

Transportation and Parking

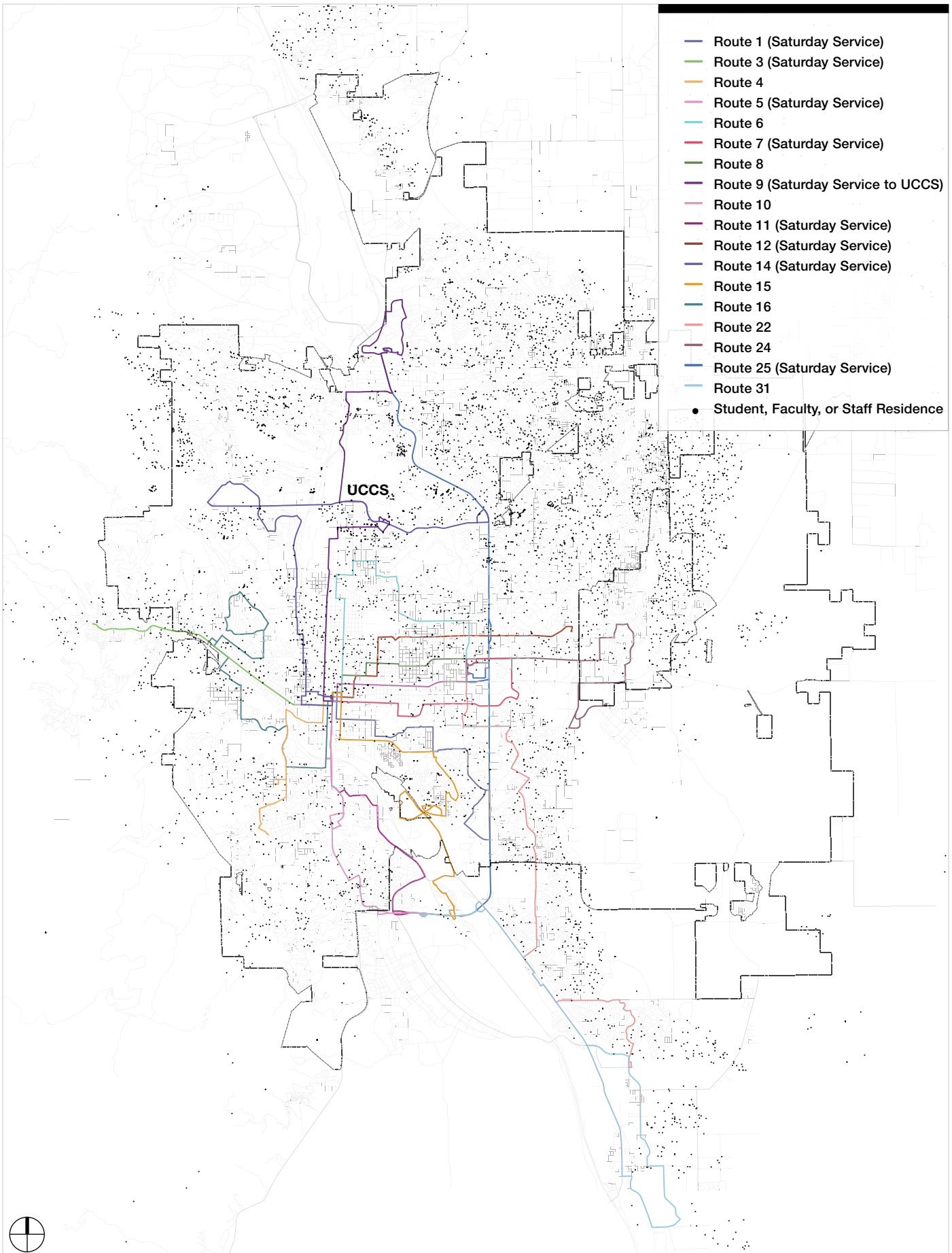
The UCCS student, faculty, and staff population is very evenly dispersed around the city and the region in terms of where they live. It is difficult to effectively serve a distributed population with public transit, especially when many commute significant distances. Two city buses serve the campus: the number 9 route runs on campus roads, stopping at the Lower Plaza adjacent to the student center and then stopping on North Nevada Avenue at the underpass. The number 14 route stops along Austin Bluffs Parkway adjacent to the Core Campus. UCCS ridership could potentially support more frequent bus service, but sufficient funding does not exist to support those services. The City of Colorado Springs has studied the feasibility of a streetcar system. While the preferred route runs along North Nevada Avenue, service to the university would not be included until later phases of development. The limited transit availability is reflected

in the fact that most people arrive at UCCS in single occupant vehicles, which creates traffic and parking challenges on campus.

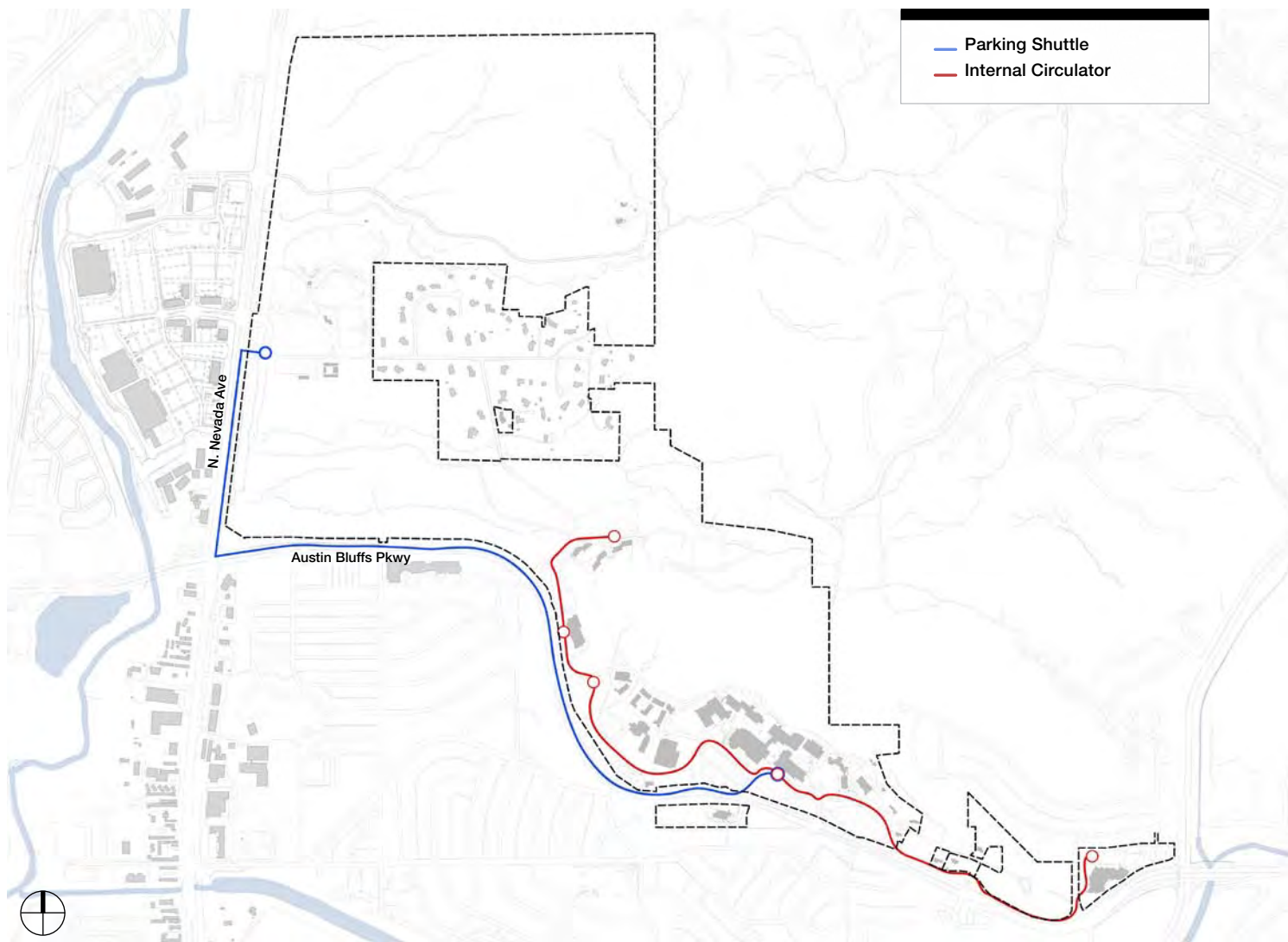
The campus has 3,351 parking spaces. Of this total, nearly 2,000 spaces located in the Core Campus are reserved for “hub” permit holders, and more than 600 additional spaces are reserved for students who live on campus. One lot in the Core, part of the parking garage, and one lot adjacent to the Recreation Center allow for hourly, paid visitor parking. This parking supply fills up quickly during peak hours from 9 am to 3 pm, Monday through Thursday, when it can be difficult to find a parking spot. There are 730 parking spaces at the Four Diamonds, where students who did not purchase a permit may park and ride a shuttle to the Core Campus. As a result of a student referendum, the university will continue to offer a free parking option to its students.



Students, faculty, and staff may purchase a hub permit to park in the Core Campus or use the Four Diamonds lots at no additional cost.



Students, faculty, and staff live throughout the City of Colorado Springs, making it challenging to provide bus access for the entire population.



The parking shuttle travels on North Nevada Avenue and Austin Bluffs Parkway, where congestion often slows its operations.

The university operates two shuttle routes that serve the campus, helping students, faculty, and staff travel between campus destinations. An internal circulator travels from Alpine Village to University Hall making 5 stops. A parking shuttle, travelling along North Nevada and Austin Bluffs Parkway, picks up those who have parked at the Four Diamonds and drops them off at the Core Campus. The shuttle has high ridership, but the traffic it encounters on the public streets slows the shuttle and prevents it from operating at higher capacity. Providing a route on campus for the shuttle to travel between the Core and North Campuses without using public streets would significantly improve its ability to serve the campus.

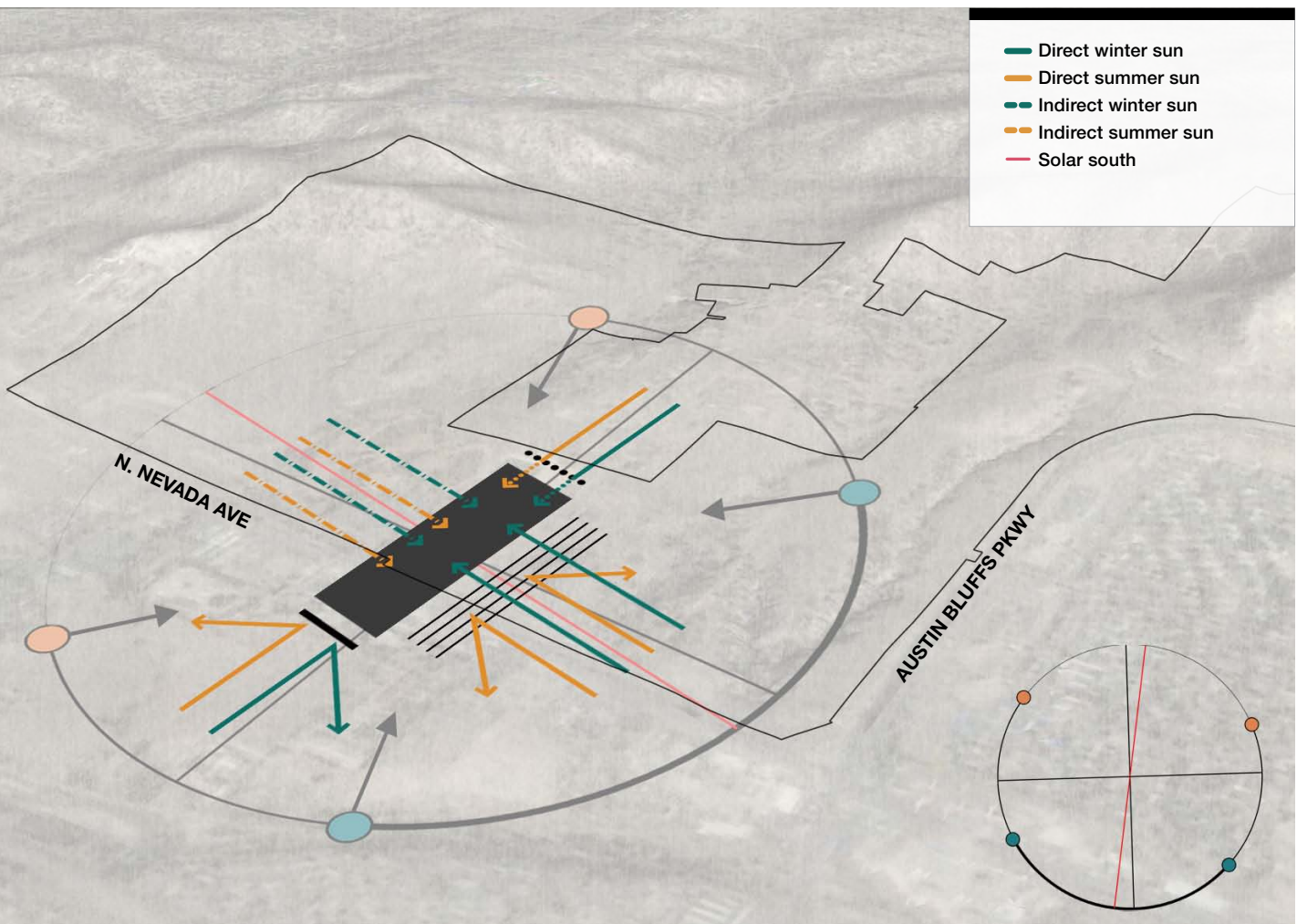
Biking, both to UCCS and around the campus, has gained popularity. The bike racks installed by the university in the past few years are often full. While steep climbs deter some riders, bike lanes along Austin Bluffs Parkway and North Nevada Avenue allow riders to access the campus from other parts of the city. Students biking on campus must share campus roads with vehicles as well as share the pedestrian spine with foot traffic that can become significant during certain times of day. Where the pedestrian spine passes through the University Center, bike riders are expected to dismount their bikes, creating an obstacle that should not be replicated in other areas of the campus. As the campus continues to grow, biking will become an even more important component of the transportation network and new infrastructure proposed in the Master Plan prioritizes bicycle accommodations.

NORTH CAMPUS SITE ANALYSIS

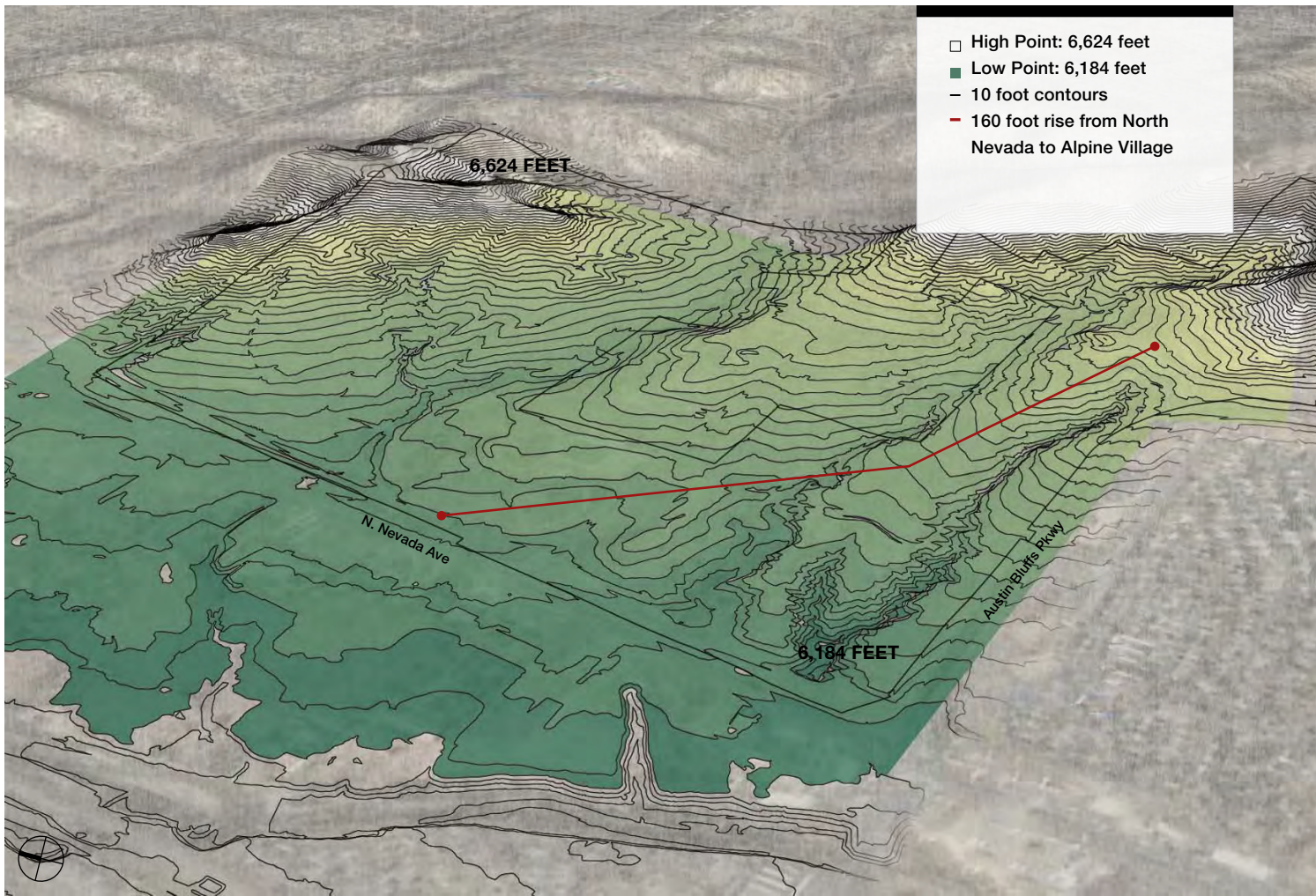
Climate

The State of Colorado receives 300 days of sunshine in a given year, and the thinner atmosphere at its higher elevations results in significant penetration of the sun's rays. Land forms surrounding the North Campus do not cast shadows across large portions of the site, maximizing its solar access. Siting buildings to respond to the sun's path throughout the day and year provides heating and lighting benefits. While continual exposure to these intense rays can damage building materials, the solar climate offers a significant opportunity to pursue solar power and hot water generation on the site.

In Colorado Springs, wind direction varies greatly, coming from both the north and the south throughout the year. Wind speeds are periodically severe and turbulent, creating uncomfortable and even hazardous outdoor conditions. The general wind patterns are occasionally interrupted by the warming Chinook winds that arrive in the spring or the Albuquerque Low winds that can bring significant snow falls from the south. To the extent possible, buildings should be sited to block the northern winter winds and to avoid creation of wind tunnels that exacerbate already windy days.



Proper building orientation and glazing strategies minimize energy use for heating, cooling, and lighting.



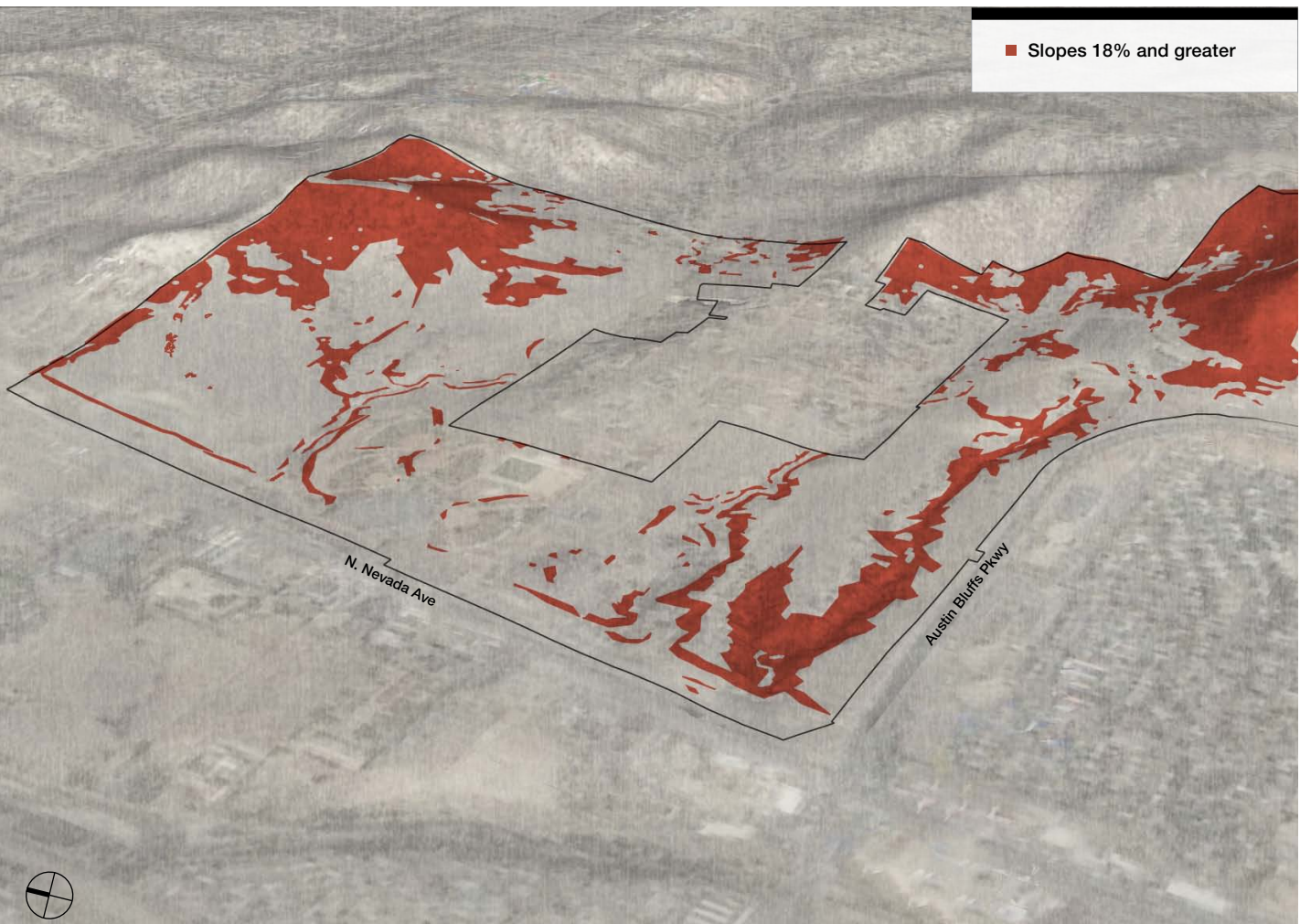
The North Campus' significant topographic changes contribute to its character but present development challenges.

Topography

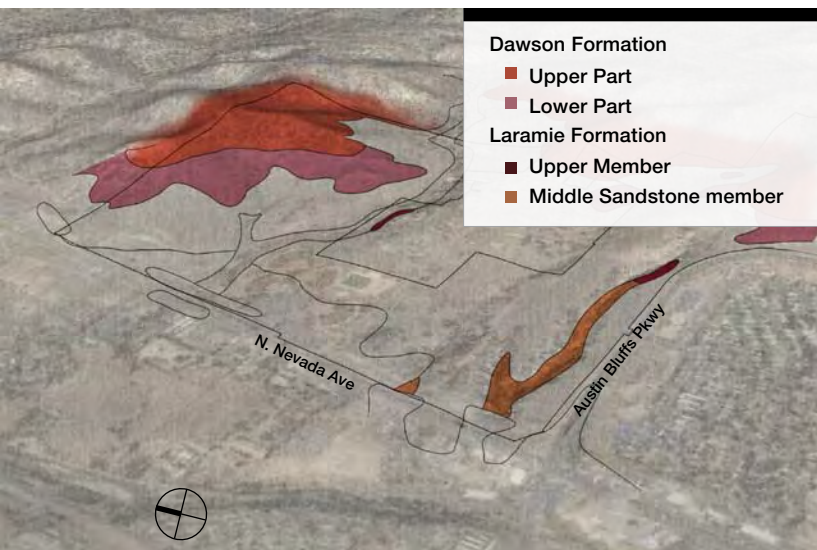
The dominant topographic features of the North Campus are the dramatic bluffs and exposed rock outcroppings ringing the north and east horizon lines, which curve east to create the signature backdrop for the existing Core Campus. While the topography contributes much to the campus' character, it also presents challenges for site development and pedestrian connectivity. The North Campus ranges in elevation from 6,184 feet to 6,624 feet, a difference of 440 feet between its high and low points. The elevation difference between Alpine Village and the Four Diamonds complex, however, is only 160 feet, suggesting that a pedestrian and bike friendly connection between the existing Core Campus and new development on the North Campus is feasible.

Slope

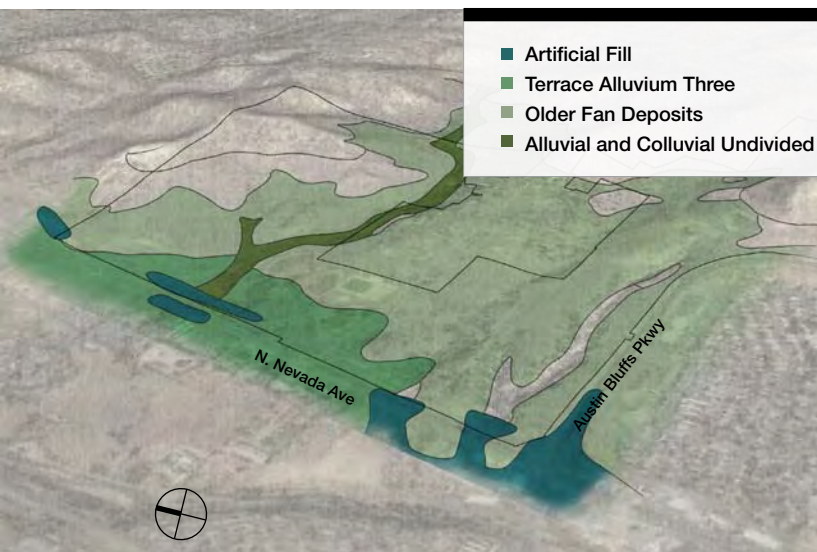
Land with a slope less than three percent can accommodate most uses without significant re-grading. Above a three percent slope, athletic fields become a challenge to site; above seven percent, surface parking proves difficult and more expensive to construct. In areas with 18 percent and greater slope, development may be feasible in some cases but should be carefully considered: construction will be complex, and it is environmentally preferable to leave these sites undisturbed. On the North Campus, gently sloping terrain in the lower elevations gives way to steep terrain culminating in rock cliffs. The drainages bisecting the site also have steep side slopes. Along the North Nevada edge, the land has been significantly altered, creating a few large, flat areas that are prime development opportunities.



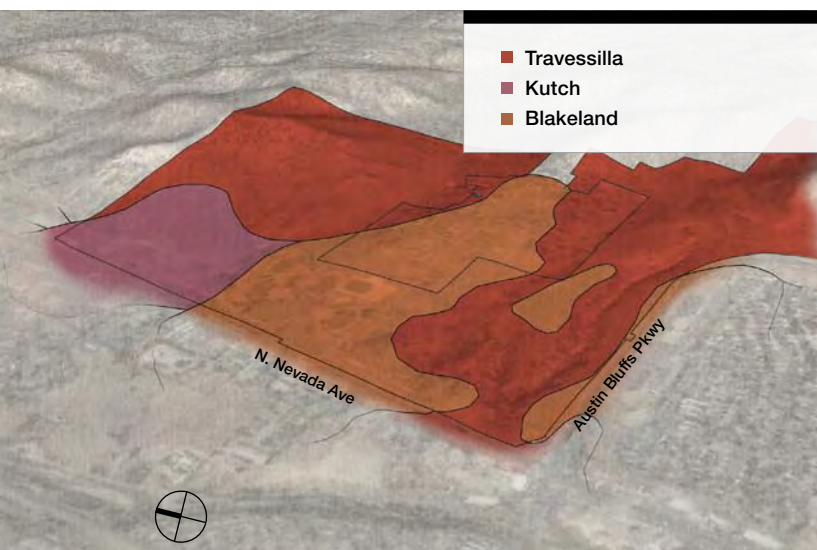
Areas of steep slope are not suitable for building.



Unstable and unique geologic formations.



Geologic formations suitable for development.



North Campus soils present development challenges.

Geology

Along with topography, geology creates the dramatic bluffs and cliffs on the North Campus. Three geologic formations found in the bluffs and arroyos pose subsurface stability hazards. Although site specific construction adaptations can mitigate these hazards, it is preferable to avoid these areas, minimizing construction cost and environmental damage.

Other geologic formations should be preserved due to their unique historic significance. The Lower Dawson Formation, located in the lower portion of the bluffs, is exposed in only one other site in Colorado. The region's early Native American populations traveled significant distances to collect these rocks because the rock is highly suitable for making tools. This unique formation should be preserved on the site wherever possible.

Soils

North Campus soils differ distinctly from those found in the Core Campus. While the Core Campus soils pose some challenges for construction and landscape, the North Campus soils will require more careful consideration. The Travessilla, Blakeland, and Kutch soils found on the North Campus erode very easily and contain low nutrient levels. To prevent unnecessary erosion, construction sites need to have tight boundaries and careful attention must be paid to runoff. Low nutrient levels in the soil make it difficult to establish new landscape communities and restore disturbed native landscapes, further emphasizing the importance of tight construction boundaries to preserve as much native landscape as possible. While all three soils will require engineered solutions to grade and site buildings, the Kutch soils in the northern area of the site are likely to pose the greatest challenges.

Hydrology

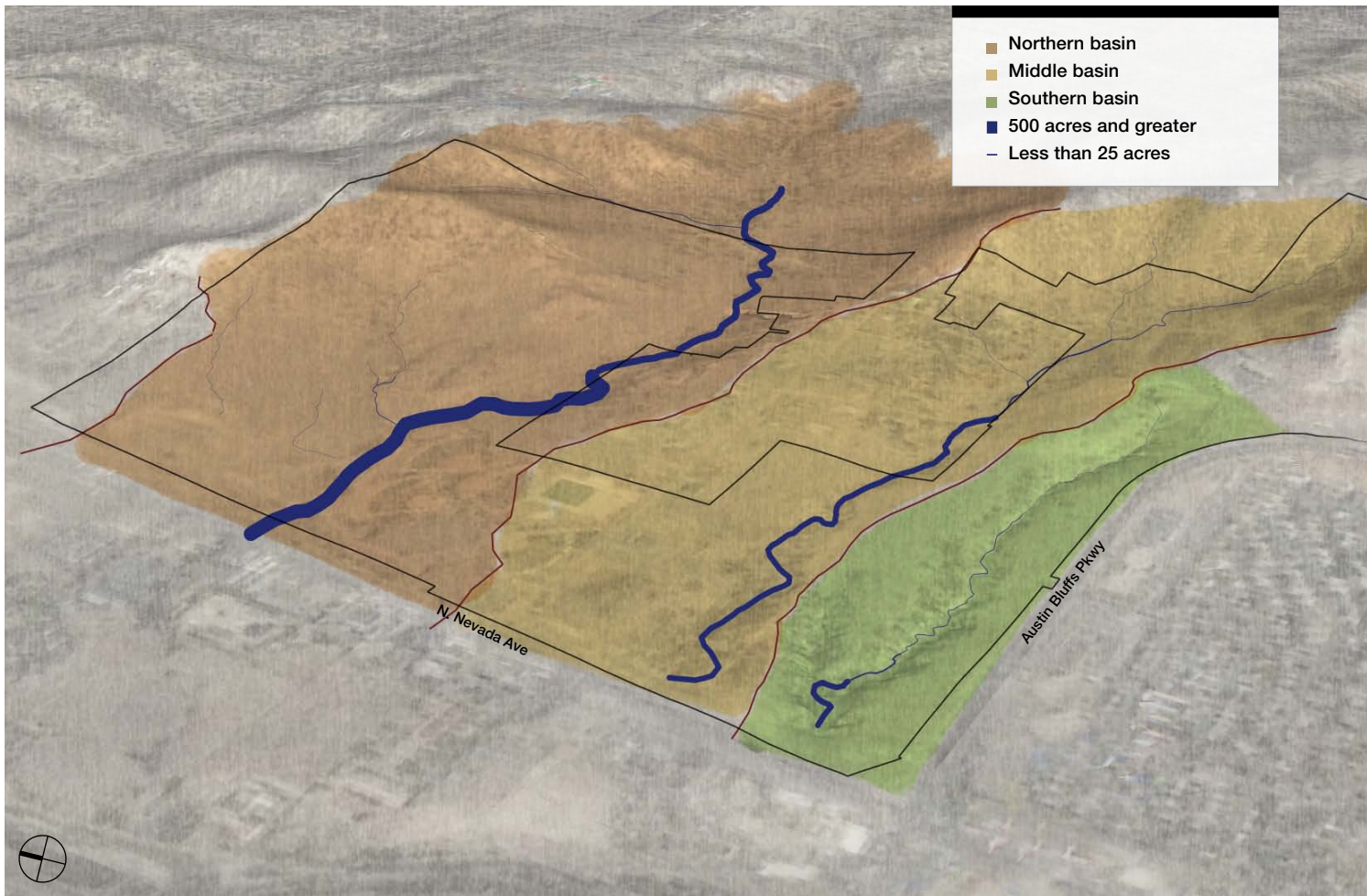
Three drainage basins define the hydrology of the site. The northernmost arroyo collects drainage from the largest amount of land, with a catchment area of over 500 acres consisting of UCCS property and surrounding areas. The other two drainages have smaller catchment areas that include mostly UCCS property, giving the university more control over stormwater runoff in these areas. The arroyos currently support a significant amount of native vegetation including grass lining their bottoms. This indicates that the bottoms of the arroyos are relatively stable. The sides of these arroyos are very steep and prone to erode rapidly when subjected to concentrated flow, which is evident in several locations.

Development west of North Nevada Avenue has altered natural drainage patterns, with surface water being piped to Monument Creek. Development in the watershed without significant regard to controlling stormwater could lead to rapid erosion in the arroyos that would be very costly and difficult to mitigate. Thus, a stormwater management program that strives to mimic natural runoff conditions after development will be important to preserving the stability of these arroyos.

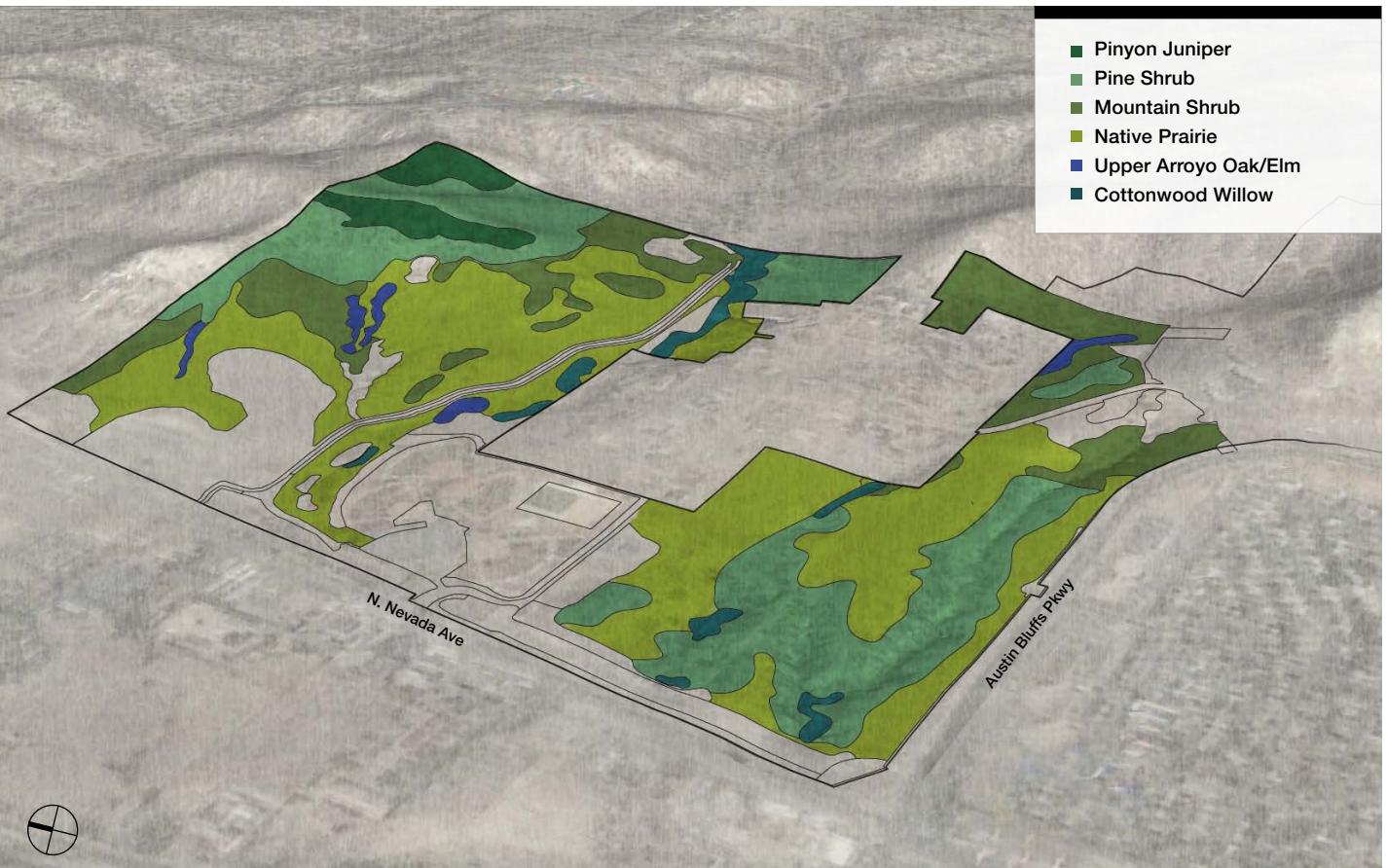
A non-detailed, approximate hydrologic analysis for the North Campus estimates pre- and post-development peak runoff rates and compares them to the existing

outfall capacity, identifying potential discharge constraints. The following summarizes three existing stormwater outfalls along the east side of North Nevada Avenue, based on discharge capacities indicated in previous drainage reports.

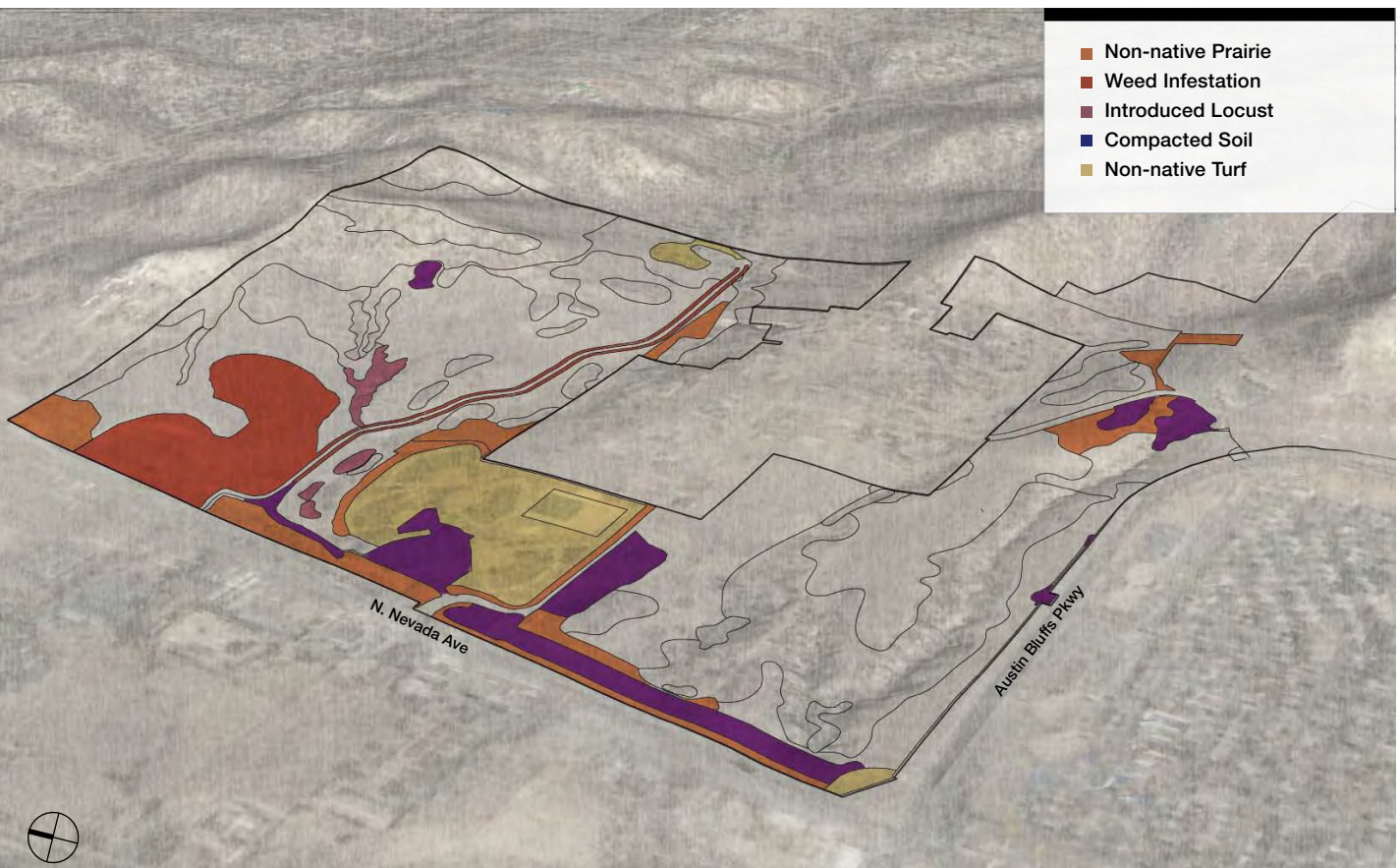
- The southern outfall, located approximately 400 feet north of Austin Bluffs Parkway, has sufficient capacity to accept 100-year peak runoff from the watershed in the existing condition provided that the existing informal detention area is maintained in the arroyo immediately upstream of the outfall.
- The middle outfall, located approximately 1,200 feet north of Austin Bluffs Parkway, has considerably less capacity than needed to accept 100-year peak runoff from the site even in the existing condition. Early discussions with City of Colorado Springs engineering staff indicated that post development peak discharge rates from the site should be limited to those that were planned for the existing systems.
- The northern outfall, located approximately 3,200 feet north of Austin Bluffs Parkway, has sufficient capacity to accept 100-year peak runoff from the watershed in the existing condition.



Three drainage basins define the North Campus. The middle outfall has considerably less capacity than the others.



The North Campus is home to several large stands of native vegetation.



Areas of disturbed vegetation are priority development sites.

Vegetation

Topography, slope, geology, soils, hydrology, and human impact all play significant roles in supporting vegetation. A large portion of the North Campus consists of undisturbed, native vegetation. Steep, rocky areas in the upper elevations of the bluffs and lower elevations of the arroyos are inhabited by pine shrub, pinyon/juniper, and mountain shrub interspersed with rock outcroppings. Flatter land in the middle elevations supports the native prairie, where the upland grasses, forbs, and cacti protect the sensitive soils from erosion. The prairie is broken from time to time with stands of cottonwood, willow, and upper arroyo oak/elm landscapes.

These plant communities are easily disturbed by human activity including earthwork, cultivation of turf, and introduction of non-native species. In disturbed areas, weeds and non-native grasses thrive despite attempts at reestablishing a native landscape. Disturbed landscapes should be considered priority development sites and development in native landscape areas should be undertaken carefully to ensure that its impacts are contained.

- 1 Native Praire
- 2 Native Prairie
- 3 Mountain Shrub
- 4 Upper Arroyo Oak/Elm
- 5 Cottonwood/Willow
- 6 Pinyon Jniper (background) and Mountain Shrub (foreground)
- 7 Weed Infestation



1



2



3



4



5



6

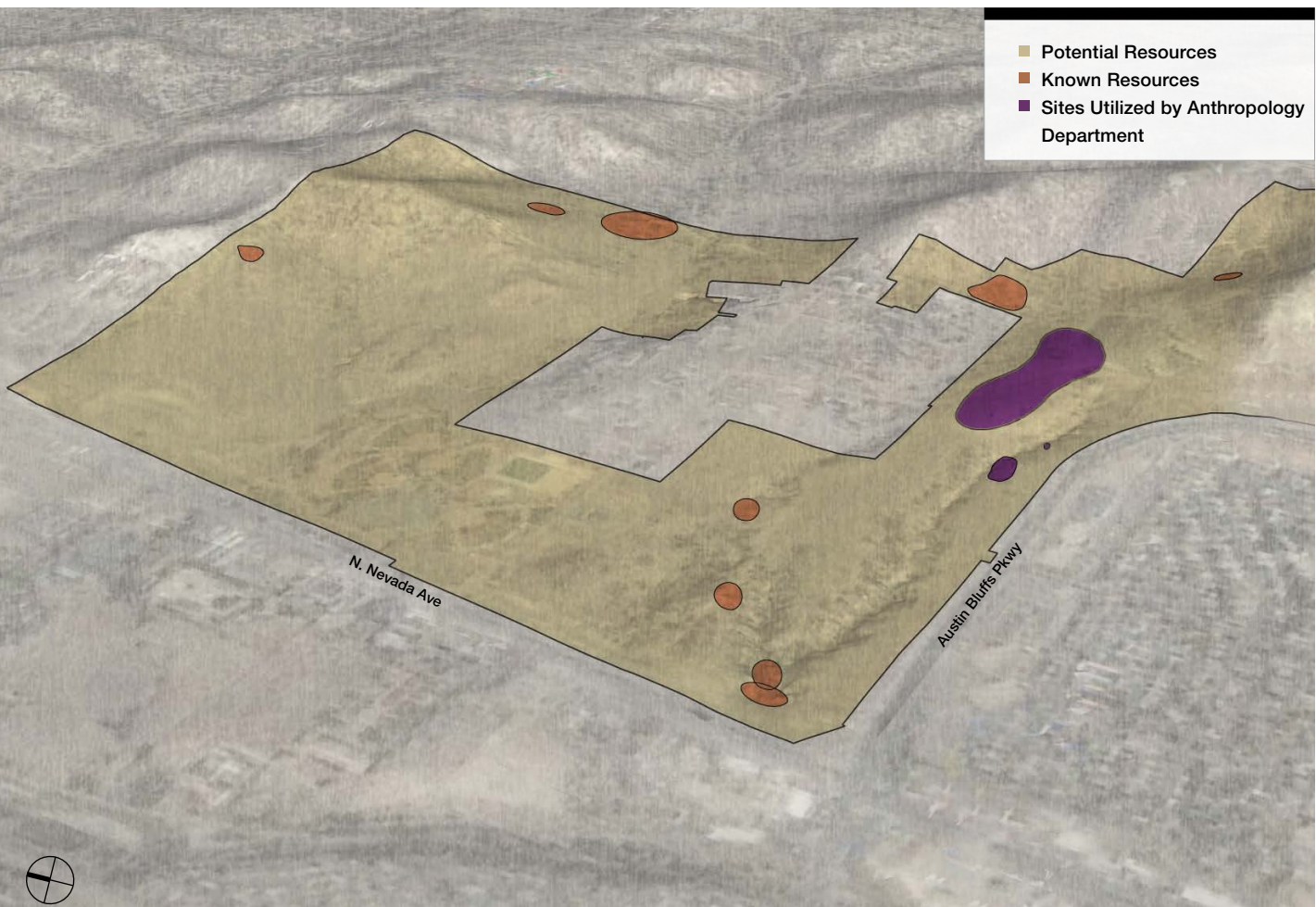


7

Cultural Resources

The North Campus' iconic rock formations, unique geologic resources, and views from upper elevations have been drawing settlement to the site for thousands of years, beginning with the Native Americans. As a result of erosion, many artifacts have already been uncovered in the North Campus' drainages. Research suggests that artifacts may be located at or below the surface across the entire site and, as a result, all North Campus construction sites must be monitored during excavation. In the past, students from the Anthropology Department have performed this monitoring for the university. Sites of known resources should be preserved until they have been properly excavated and documented. However, after this process is complete they may become campus development sites as appropriate. The Anthropology Department uses two sites, located northwest of Alpine Village, as part of its curriculum. These areas will be under excavation and documentation for a longer time period before they may be candidates for development.

Faculty members in the Department of Anthropology have identified the possibility that rock formations already uncovered on the North Campus may be Native American vision quest sites. The vision quest was a rite of passage into adulthood for young males who would go off by themselves with no food or water until they experienced a vision revealing spirit helpers to guide them. These sites can only be formally identified by a Native American elder. In this region, the Ute tribe would likely take the lead role in a consultation process. Working with the Department of Anthropology, university leadership will need to explore this issue further to determine if it is necessary to initiate a consultation and the appropriate timing for a consultation. If the sites are designated as vision quest sites, the university would need to determine a strategy to preserve this aspect of the tribe and campus heritage. This may include documenting the sites, taking measures to ensure they remain secluded, or preserving the viewshed from these locations.



Due to the site's rich history, artifacts may be located across the entire site.

Mining

The Colorado Springs region has a history of both formal and informal mining activities beginning in the late nineteenth century and continuing as a driver of rapid development in the early twentieth century. Abandoned mines can compromise structural stability and complicate construction for development above them. Abandoned mines have been identified below ground on the Core Campus, but have been evaluated and determined to be of low concern. There is no evidence that formal or informal “bandit” mines exist on the North Campus.

Utilities

Sanitary Sewer

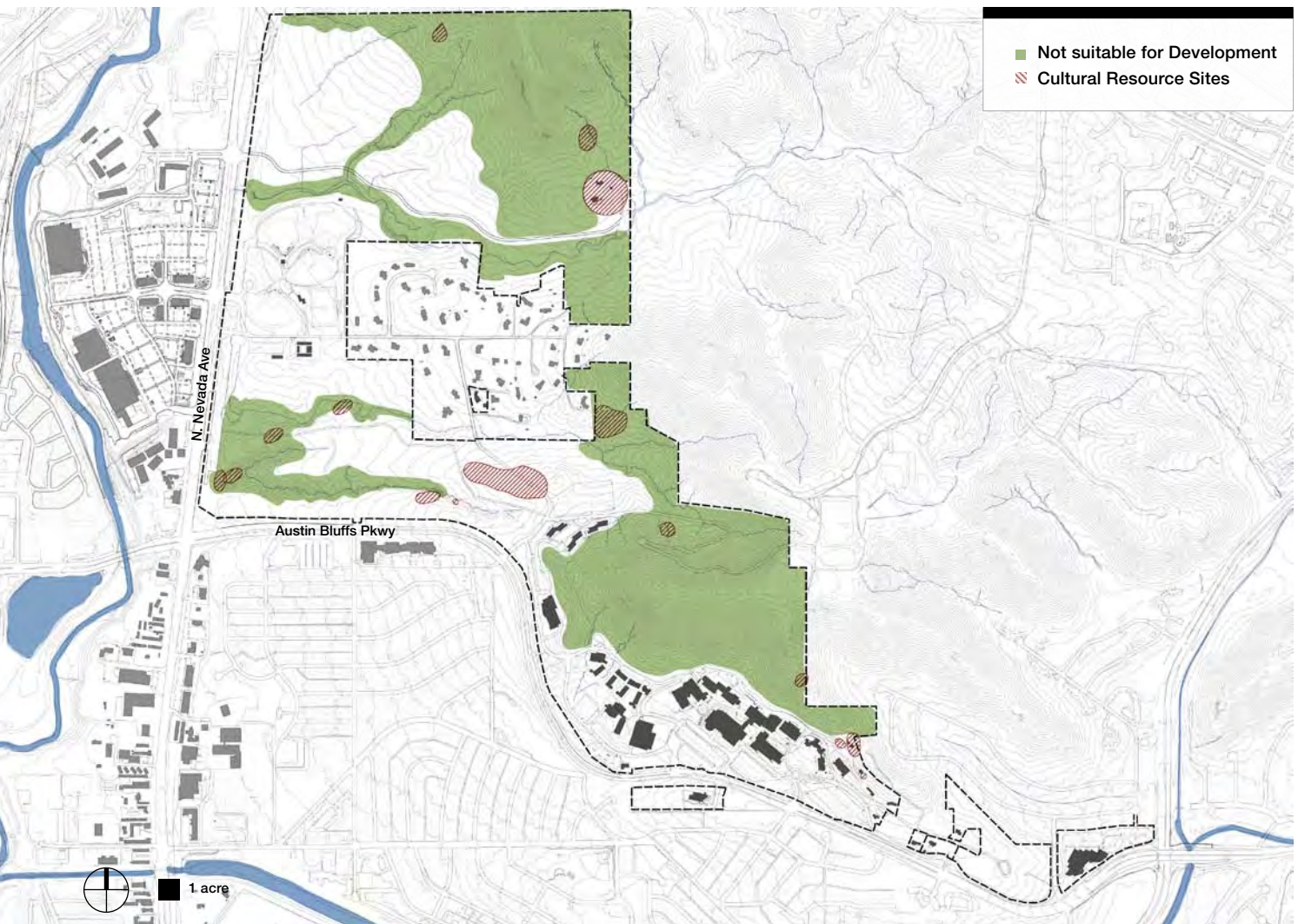
Despite being relatively underdeveloped, public sanitary sewer lines exist on the North and East Campuses, providing service to existing residential, academic, and athletic uses. Sanitary sewer capacity for new development is significantly greater in the North Campus than it is in the East Campus, where constrained capacity in downstream pipes south of Austin Bluffs Parkway could require costly upgrades. This is particularly important in considering the location of residence halls, which create significant sanitary sewer demand.

Water

The Core Campus is relatively built out and has extensive water service lines. Water lines already cross the North and East Campuses, providing service to University Hall and private residences on the East Campus and the Heller Center, Eagle Rock Neighborhood, Four Diamonds Complex, and Alpine Village on the North Campus. While these lines are well-distributed across the sites, the current demands are fairly minimal. As the North and East Campuses are built out, new and upsized water lines will be needed to meet more intense demands.

Gas and Electric

Colorado Springs Utilities (CSU) provides electricity and gas to each building on the UCCS campus. CSU owns the electric transformers and gas meters, which meter each building separately. They also maintain the transformers and service access to them. The university maintains electrical service and gas lines routed underground from the meter to the building. Each building has an individual HVAC unit with no central plant for the campus. The university plans to continue purchasing the electricity and gas needed to service future development from CSU.



While the university has a significant amount of land, much of it is not suitable for development.

Development Constraints

While the UCCS campus consists of 445 acres of land, much of it is constrained by topography, slope, geology, hydrology, and cultural significance. While these areas will not become part of the university's built infrastructure, they are a vital and contributing part of the campus, providing the character and sense of place that distinguish UCCS from other institutions in the state and country.

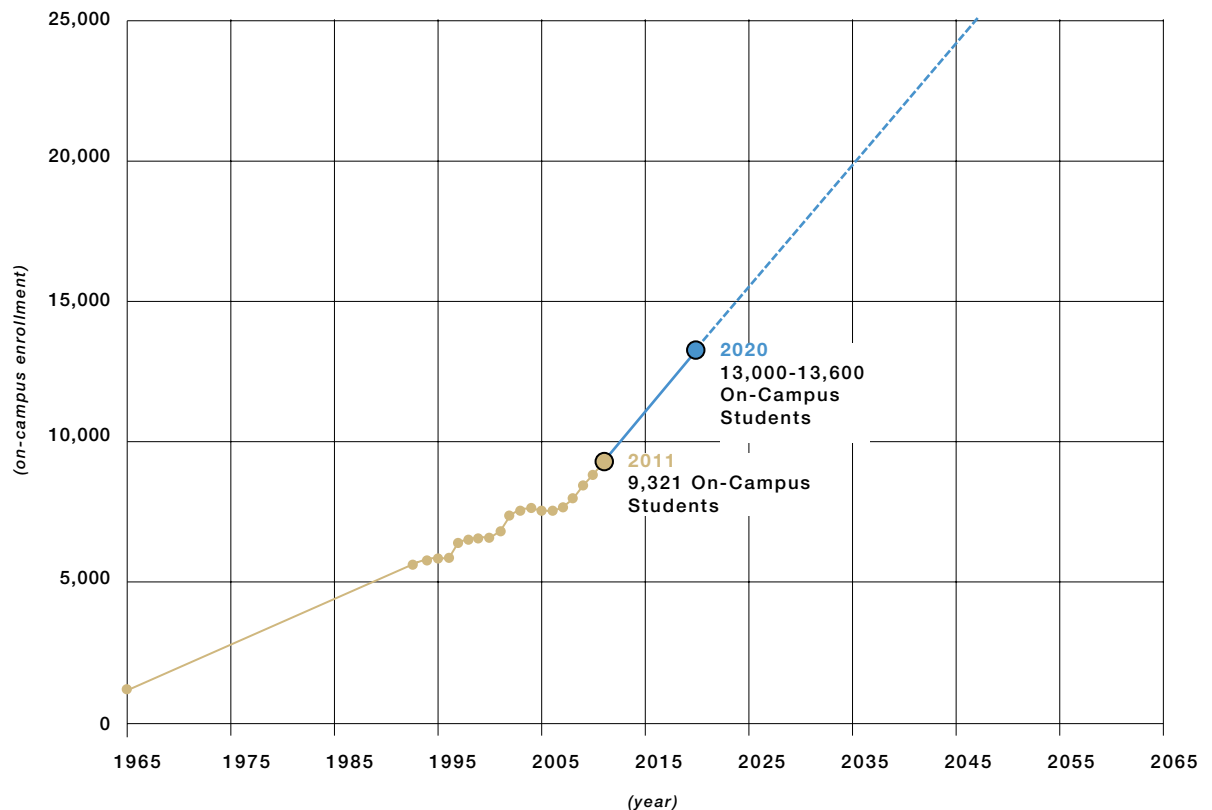
The developable land that remains, however, offers the campus significant capacity to accommodate new facilities to support a larger student body in the future.

Campus Growth & Facilities Needs

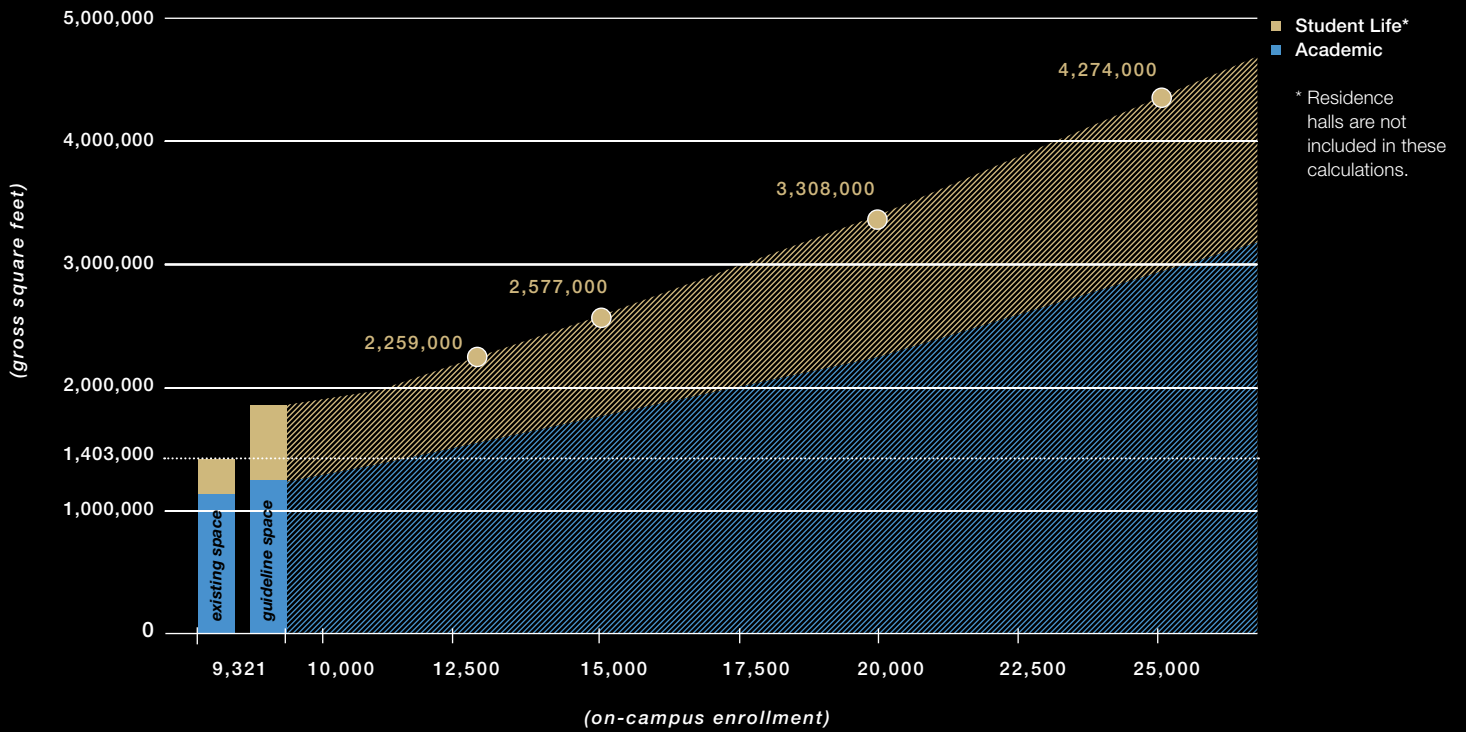
ENROLLMENT GROWTH

At its inception in 1965, approximately 1,200 students attended UCCS. Over the last 45 years, enrollment has grown to 9,321 students (Fall 2011). While the rate of enrollment growth has varied over the years, the university has always maintained growth at some level. As the designated growth campus within the University of Colorado System, both state and university leadership anticipate that enrollment gains will continue as the State of Colorado's population increases and more people choose to pursue higher education. The university's Strategic Plan projects that overall enrollment will grow to between 13,000 and 13,600 students by 2020. Growing from 7,584 students to 11,000 students, the undergraduate population will increase significantly. The plan is less specific about graduate student growth, anticipating between 2,000 and 2,600 graduate students in 2020. As part of this growth, the university expects to attract a significant number of new students from outside the region as it moves from a commuter campus to a residential university.

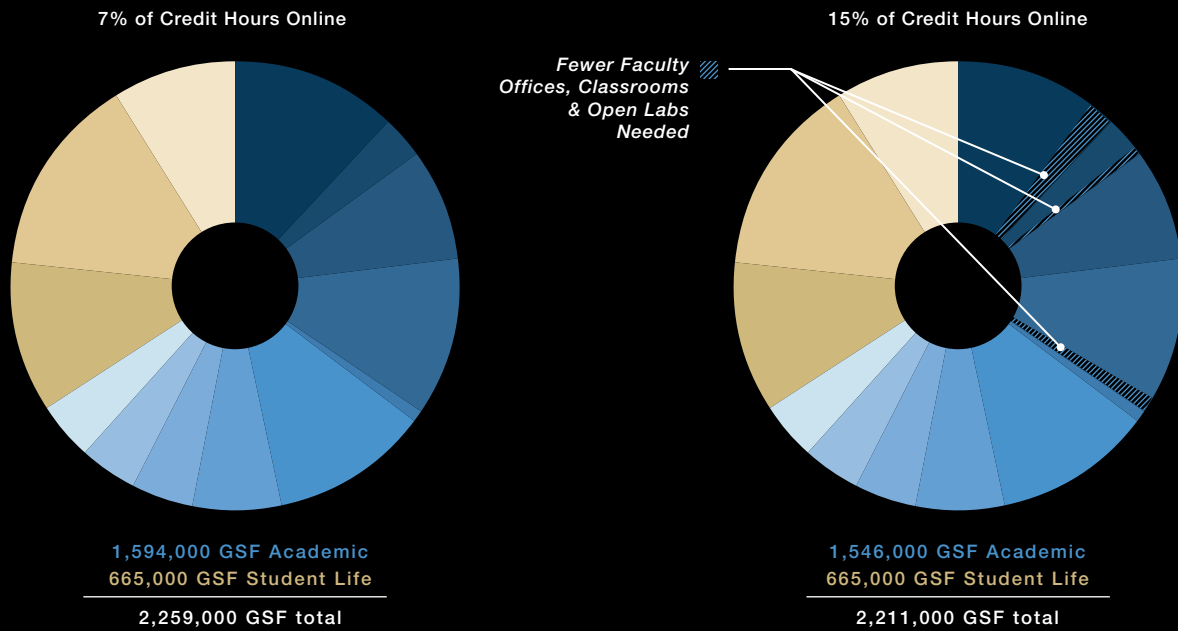
ENROLLMENT TRENDS



ACADEMIC & STUDENT LIFE* FACILITIES NEEDS



NEW FACILITIES FOR 13,000 STUDENTS: ONLINE COURSES



- Classrooms
- Open Labs
- Research Labs
- Academic Offices
- Other Academic Departmental
- Library
- Administrative Offices
- Assembly, Exhibit, Gallery, Theatre works
- Other Administrative Departmental
- Physical Plant
- Athletics
- Recreation
- Student Union

Doubling the percentage of credit hours taken online by 2020 would reduce academic space needed by 48,000 GSF.

Although current “on-campus” enrollment at UCCS is 9,321 students, the number of total students is more than this headcount due to online enrollment. While this is a small portion of the total student body today, a larger portion of enrollment growth will be accommodated through distance learning programs in the future. This difference in accounting is important because on-campus student headcount drives most projections of space needs as online-only students do not use classrooms, labs, student union spaces, on-campus housing, recreation, or parking facilities. In a few cases, the instructors teaching online courses work remotely as well, further reducing these students’ impact on the physical campus footprint. For the purposes of the high-level space needs projections in this Master Plan, it is assumed that the entire projected population will be “on-campus” students.

◀ NOTE:

Facilities needs projections assume that as enrollment grows, more research space per faculty will be needed and more athletics teams will be supported. For more details about the assumptions used to generate the projections, please see Appendix A.

While the Strategic Plan focuses on the year 2020, the Master Plan assesses the full build-out capacity of the university’s current real estate holdings in order to determine the responsible capacity of the land.

FUTURE CAMPUS FACILITIES NEEDS

State guidelines suggest that the university has an overall deficit of space due to shortages in office, student life, arts, athletics, and recreation facilities. The guidelines are meant as general benchmarks rather than prescriptive requirements, and the ideal amount of space needed by the university likely lies somewhere in between the existing space levels and the guideline levels. To assess full build-out capacity of the campus, the Master Plan uses the state guidelines to determine order of magnitude space need at different enrollment levels. It should be noted that these guidelines do not account for more intensive space usage patterns that might be implemented, allowing higher student populations.

The guidelines suggest that to accommodate 13,000 students on campus, more than 850,000 GSF of new academic and student life facilities will be needed (residence halls are excluded from these projections). If enrollment rises towards 20,000 students, nearly 2,000,000 GSF of new academic and student life facilities (residence halls excluded) will be needed. Appendix A includes detailed documentation of the assumptions used to generate these projections. However, the university is experiencing several trends that may impact future space needs.

The Impact of Online Courses and Hybrid Learning Models

As discussed previously, some UCCS students complete their education entirely online with little physical impact on campus facilities. However, online courses are taken by students in multiple formats for varied reasons. Students who visit campus regularly, taking most of their courses in person, participating in university activities, and even living in residence halls, may choose to enroll in an online course to address a scheduling conflict or fulfill a requirement for a course with limited availability. Currently, seven percent of credit hours are taken in online-only formats. Moreover, some three-credit courses operate as hybrid courses, holding two-hour sessions in person each week and hosting the third hour online.

While this trend will undoubtedly impact campus culture, classroom demand, and IT infrastructure, its impact on long-term space needs is relatively small. Projections show that if 15 percent of credit hours are taken online and 7.5 percent of faculty work remotely by 2020, the university could build approximately 48,000 GSF less classroom, lab, and faculty office space (Appendix A details this analysis). This impact equates to a relatively small university-scale building. Ultimately, hybrid students still engage in campus life, visiting the student union and dining facilities, meeting informally with classmates and instructors, and using recreation facilities, particularly if they live on campus. Due to the uncertain future of online education, full build-out capacity is assessed using existing state guidelines.

Higher Utilization of Classrooms

State space planning guidelines suggest that, on average, a classroom should be in use 30 hours per week with 67 percent of its seats full during those hours. Based on these benchmarks, UCCS classrooms are appropriately utilized, suggesting that the right amount of classroom space is available.

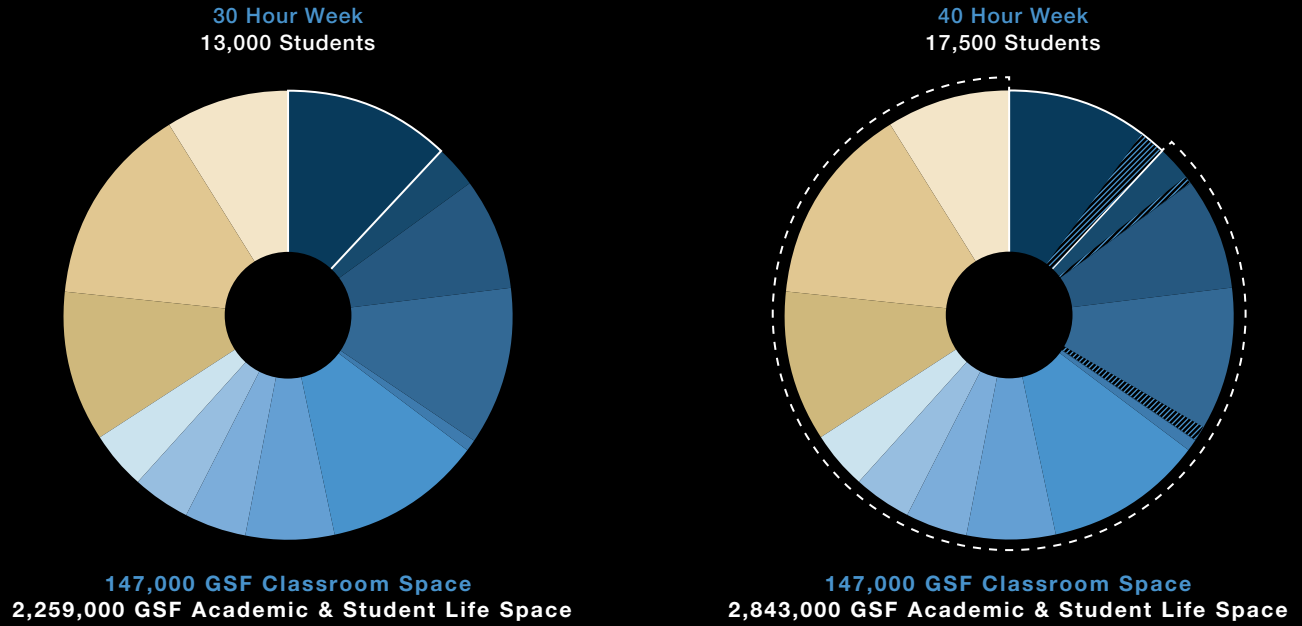
University leadership has identified classroom utilization as an opportunity to increase its efficiency. Rather than continuing to build new classrooms, they strive to first maximize use of the resources currently available. Projections show that increasing utilization to 40 hours per week by 2020 would allow the university to accommodate the projected enrollment growth without building significant numbers of new classrooms. As the campus continues to grow, the university could accommodate more students within its classrooms at full build-out capacity than state guidelines suggest. However, increasing classroom utilization and enrollment without accounting for a corresponding increase in housing, student life, library, and other support space will present challenges on campus. It is important to note that this analysis only assesses overall quantity of classroom space and does not address classroom sizes and configurations, where mismatches between class sizes and classroom types may exist.

While initiatives including Weekend University are increasing the hours of classroom utilization per week, there are still opportunities for greater utilization. However, as the effectiveness of implementing higher classroom utilization is uncertain, the Master Plan assesses full build-out capacity using state guidelines for classroom space and utilization.

Increased On-campus Housing

State guidelines do not include recommendations for residence halls, which have a significant land use impact. Currently, the university's residence halls accommodate 900 students, allowing 9.6 percent of students to live on campus. UCCS residence halls are very popular: students often cite the high quality of residence life as a reason they chose to attend the university, and there are often waiting lists for on-campus housing. Research shows that students who live on campus have higher grade point averages, are more likely to get involved in university activities, and are more likely to graduate. An active residential community also helps activate the campus throughout the evening and weekend. As enrollment of students from outside of Colorado Springs increases, there will be increased demand for on-campus housing.

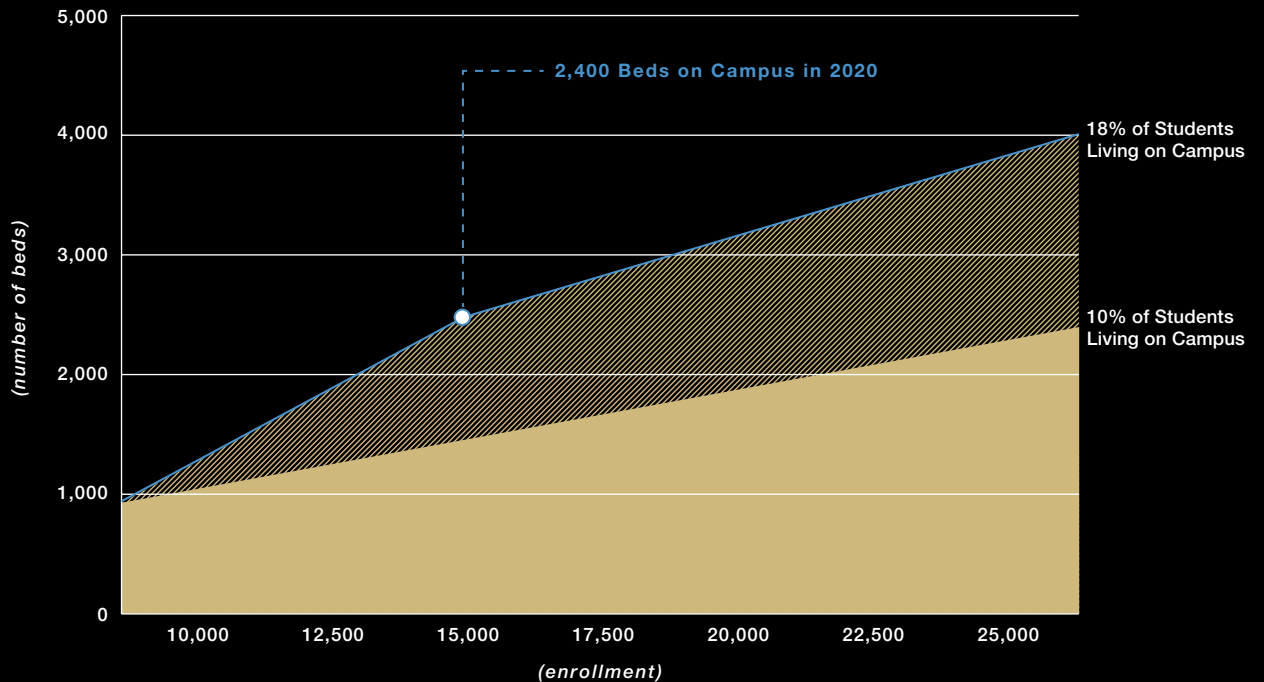
INCREASED CLASSROOM UTILIZATION



- Classrooms
- Open Labs
- Research Labs
- Academic Offices
- Other Academic Departmental
- Library
- Administrative Offices
- Assembly, Exhibit, Gallery, Theatre works
- Other Administrative Departmental
- Physical Plant
- Athletics
- Recreation
- Student Union

Increasing overall classroom utilization to 40 hours per week by 2020 would allow the university to accommodate 4,500 additional students in the same amount of classroom space. However, this would create deficits in other space categories to serve this larger student body.

INCREASED ON-CAMPUS HOUSING



The university plans to add 1,500 beds on campus by 2020 to accommodate 2,400 total students in on-campus housing. This will increase the percentage of students living on campus to over 18 percent, similar to institutions such as Colorado State University - Fort Collins and the University of Colorado Boulder. This requires a land use commitment to residence halls that must be accommodated in the Master Plan, particularly as the student body continues to grow. The university has already begun to move towards this target with the Summit Village expansion already underway. The remodel of existing housing will add 18 beds, and the design of two new residence halls to house 192 students, for a total of 210 new beds. In the future, however, there may be opportunities for the university to develop upper division student housing near the campus but not on university property through development partnerships. This might allow the university to allocate more of its land to academic uses.

Parking

As a campus with a large number of commuters and limited public transit options, parking is a challenge. While a lack of parking on campus is detrimental to the functioning of the university and surrounding neighborhoods, structured parking is very costly to build, and surface parking consumes valuable land. The Master Plan allocates land to provide adequate parking without compromising the university's ability to develop the facilities critical to its mission. The university currently has a ratio of 0.36 parking spaces per enrolled student. Due to the high utilization of existing parking facilities that can make it difficult to park on campus, the Master Plan assumes that, moving forward, the university would strive for a ratio of 0.40 parking space per enrolled student.

FACILITIES NEEDS

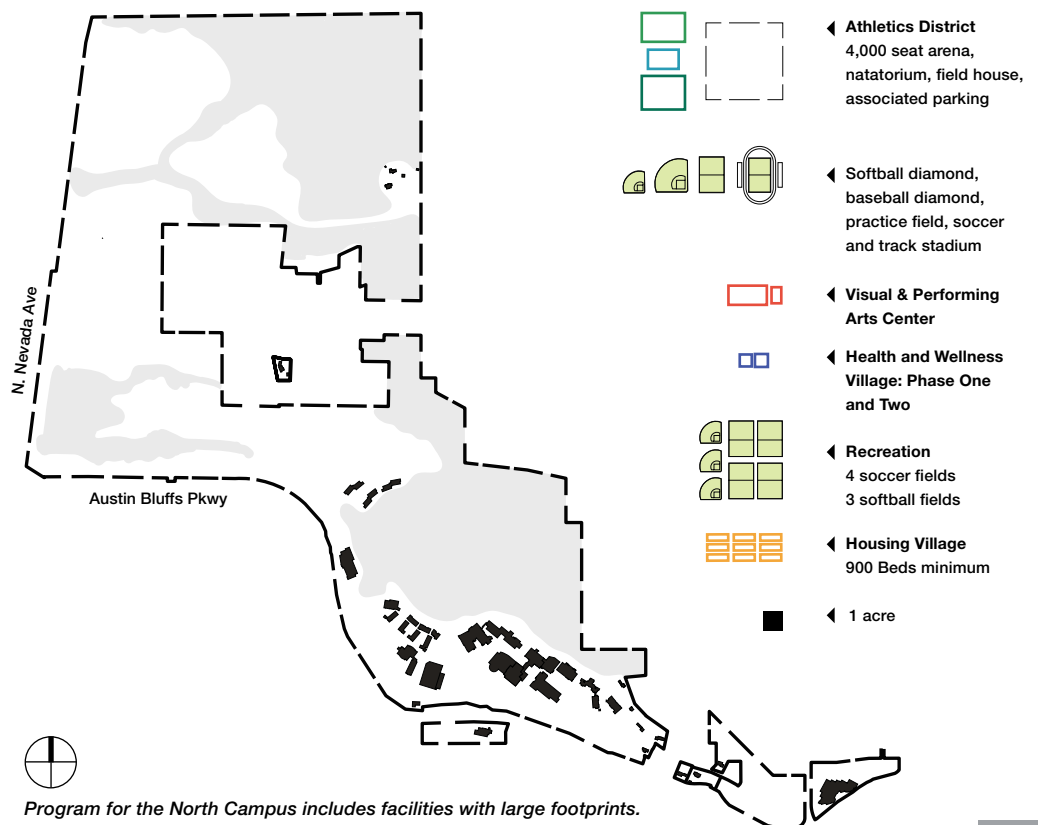
	ENROLLMENT		ACADEMIC & STUDENT LIFE			HOUSING		PARKING	
	On-Campus Student Headcount	Academic GSF	Student Life GSF	Total GSF	Difference From Existing	Beds	Difference From Existing	Parking	Difference From Existing
Fall 2011 Existing	9,321	1,116,941	285,513	1,403,454	—	900	—	3,350	—
Fall 2011 Guideline	9,321	1,232,000	606,000	1,838,000	434,546	1,491	591	3,728	378
2020	13,000	1,594,000	665,000	2,259,000	857,546	2,400	1,500	5,200	1,850
	15,000	1,825,000	752,000	2,577,000	1,173,546	2,700	1,800	6,000	2,650
	20,000	2,369,000	939,000	3,308,000	1,904,546	3,600	2,700	8,000	4,650
	25,000	3,125,000	1,149,000	4,274,000	2,870,546	4,500	3,600	10,000	6,650

NORTH CAMPUS PROGRAMMING

The North Campus plays a critical role in accommodating the university's future space needs and offers opportunities to partner with outside organizations to support shared facilities. Easy access off North Nevada Avenue makes North Campus sites ideal for university facilities involving public interaction, such as performance venues, galleries, and clinics. As a significantly sized site adjacent to the Core, it offers an opportunity to accommodate functions that do not necessarily need to be located in the Core Campus. The full build out of the Master Plan includes the following program elements in the North Campus to support the needs of a growing university and the vision of community partnerships.

Athletics

The Athletics Department currently occupies a central Core Campus location in the University Center and shares facilities with conferencing services and student union functions. As a growing student body supports more athletic activities, a dedicated complex, located on the North Campus, will fully support the department's needs. This dedicated complex could be developed in partnership to host community and entertainment events, in addition to UCCS athletics. The university envisions a 4,000-seat arena anchoring a complex with a soccer and track stadium, softball diamond, baseball diamond, and one or two practice fields. In addition, sites will be reserved for an indoor sports field house and a natatorium. Due to their large footprint and dimensional constraints, it is important to reserve adequately sized sites for these facilities even though they are considered long-term needs.



Program for the North Campus includes facilities with large footprints.

Visual and Performing Arts

The university's Visual and Performing Arts (VAPA) programs are scattered through different buildings across the campus, stretching from University Hall to mobile units on the North Campus. These diverse locations negatively impact operations, and their galleries and performance venues can be difficult to access. VAPA faculty members describe their department as highly collaborative and interdisciplinary. A consolidated facility along North Nevada Avenue that includes performance venues, studios, and gallery space would offer significant opportunities for extensive collaboration within the department as well as partnership opportunities to increase community engagement.

Health and Wellness Village

An increased focus on health and wellness is an important part of the university's Strategic Plan. UCCS envisions the Lane Center, a partnership between Peak Vista Community Health Centers and university academic and clinic programs, as the first phase of a series of academic medical facilities on the North Campus. Ties to the University of Colorado Medical School may be strengthened in the future as well. A number of the school's medical residents already work in the Colorado Springs region due to a limited number of residency positions in Denver, and the University of Colorado's proposed lease of Memorial Hospital has the potential to expedite the expansion of a Health and Wellness Village on the North Campus.

Recreational Fields

The existing Four Diamonds Complex is highly scheduled to accommodate university and Colorado Christian School athletics, intramurals, and community recreation. A growing student body with an increasing population of on-campus residents will generate greater demand for recreational opportunities and create additional development pressure on the Four Diamonds site. As facilities are built in the current location of Four Diamonds fields it will be necessary to find replacement locations to accommodate this expanding recreational need. Finding flat sites for new and relocated fields amidst the campus' significant topography is challenging. The Master Plan identifies opportunities for artificial turf fields

that accommodate intensive use and are integrated into housing and parking developments.

Student Housing

The North Campus offers land to develop new student housing in support of the university's goal to have more than 20 percent of students living on campus. Proximity to the other academic and recreational facilities planned for the North Campus as well as to University Village Colorado makes this a desirable location for housing. The university will continue to offer a mix of suite-style units and apartment-style units clustered into villages with a minimum of 900 beds. Within student housing, food service facilities will promote socialization. Dining facilities support suite-style housing, while smaller convenience stores or coffee shops serve apartment units, which include kitchens. Students and administrators often note the current lack of gathering and meeting spaces in existing residence halls. Ground floors of new residence halls should be programmed to include ample space for these activities.

General Campus Expansion

As the university grows, facilities' needs and funding opportunities that cannot be anticipated in advance will undoubtedly arise. The Master Plan includes general building sites to accommodate future needs for academic, research, administrative, and housing facilities. By identifying future building sites that are well-connected to the Core Campus through transit, bike, and pedestrian connections, the Master Plan ensures that future academic facilities will be integrated into the campus fabric.

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Concept Plan

Several overarching themes emerged from focus group and public forum meetings with the university community, analysis of the campus setting with a focus on the North Campus, and projections of campus growth potential:

- UCCS has a unique identity as a well-respected yet affordable university that fosters a close-knit community.
- The natural setting of Colorado Springs, including its native landscape and views of the Front Range, Austin Bluffs, and Pulpit Rock, contribute to the university's unique sense of place.
- A lack of spaces to support student and residence life is felt on campus today, while future enrollment growth will create facilities needs across the board.
- Building partnerships with outside organizations creates significant opportunities to fund new facilities.
- The North and East Campuses are critical to accommodating projected growth, but feel disconnected from the Core Campus.
- The North and East Campus sites are sensitive environmental resources that need to be respected.

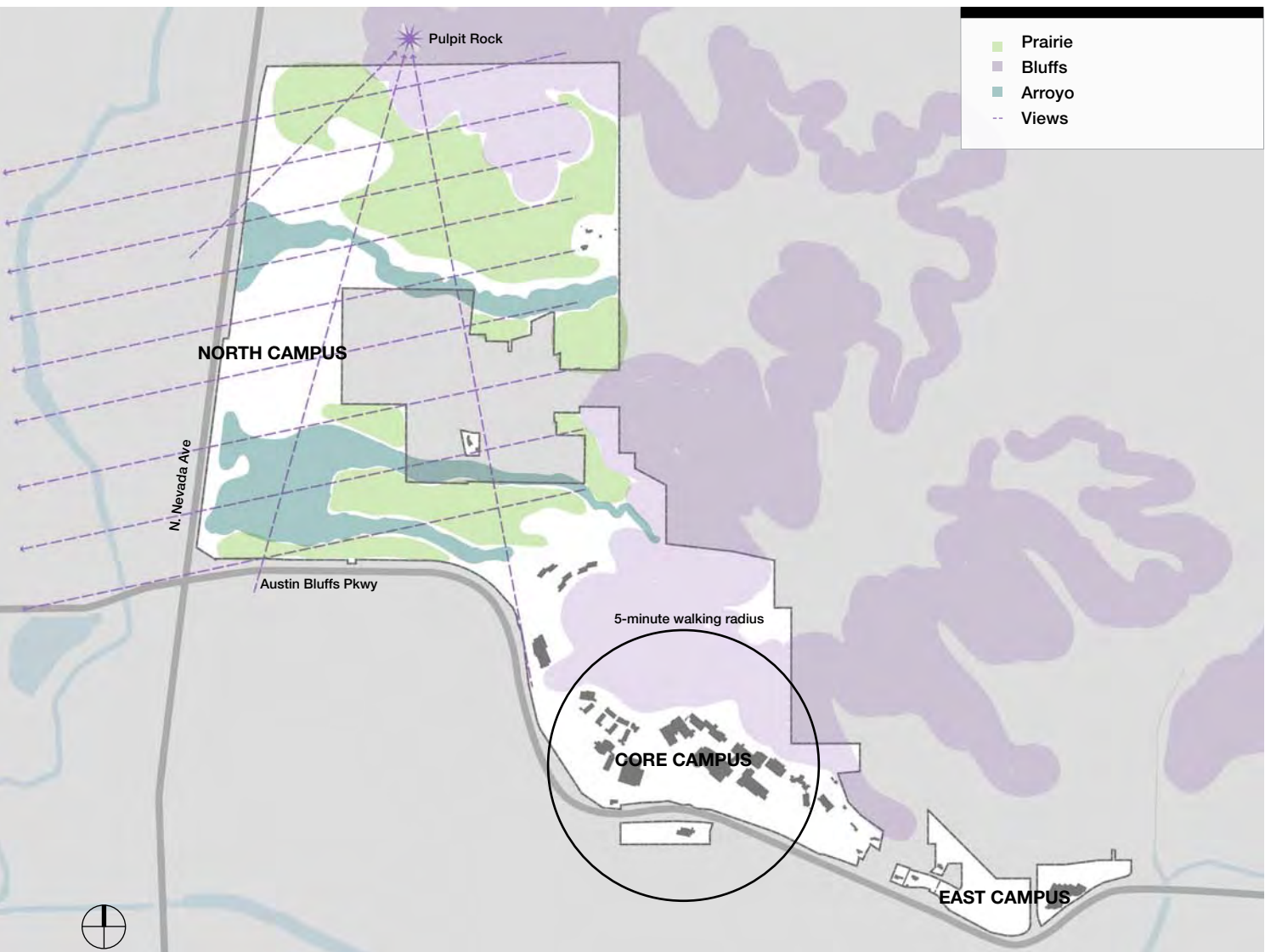
These themes informed a Concept Plan, which dictates that growth must be accommodated based on three principles:

1. Respect natural features.

2. Reinforce vibrant campus anchors.

3. Connect campus destinations.

These three principles can be characterized as “respecting the responsible capacity of the land.”



Incorporating natural features into future development fosters a unique sense of place.

Respect Natural Features

The university’s setting perched among the Austin Bluffs with uninterrupted views of Pikes Peak, the Front Range, and Pulpit Rock differentiates it from every other university in the state and country. Yet the topography that creates this dramatic landscape prevents many areas of the campus from being easily developed. Similarly, the bluff, prairie, and arroyo landscapes - and the soils that support them - are a fascinating educational opportunities, while posing significant construction challenges.

Respecting these natural features will provide an opportunity to enhance the sense of place, but it will also be critical to avoiding excessive development cost and environmental damage. As enrollment growth creates a need for new facilities, each new development provides opportunities for the university community to interact with the surrounding landscape in a way that enhances their appreciation of it without harming its natural functionality. Building siting and massing will be designed carefully to maintain and frame important views. Drainage corridors will respect and enhance natural stormwater flows. Large stands of native vegetation will be preserved and native species reintroduced to developed landscapes.

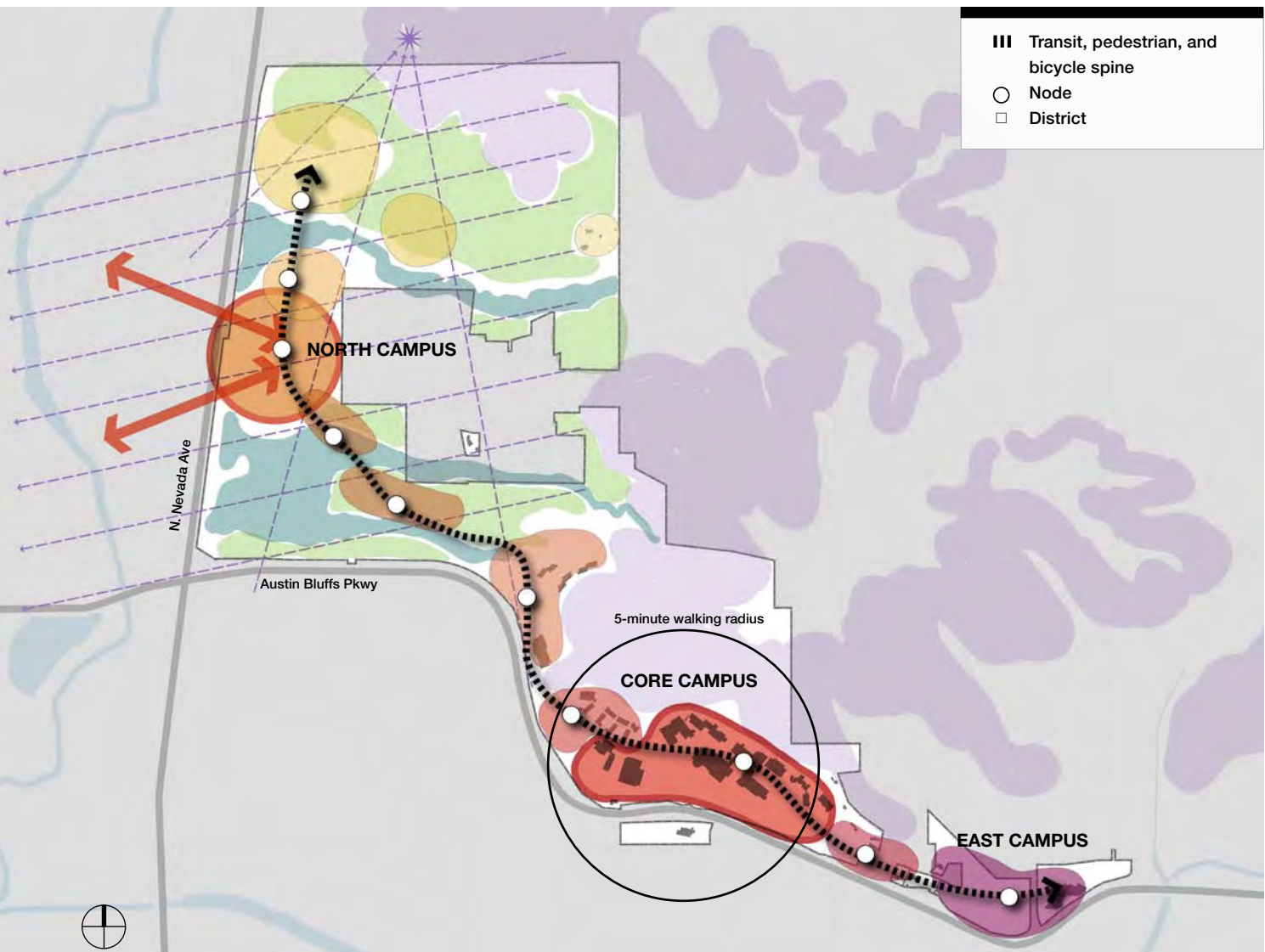


The Core Campus and new North Nevada development are campus anchors.

Reinforce Vibrant Campus Anchors

The Core Campus is a tight-knit, academic district with a mix of uses within close walking distance. The pedestrian spine connects the campus together in a way that is easy to navigate and provides a common ground where the university community interacts with one another as part of their daily routine. This feeling of community is preserved and enhanced as the campus grows.

The lessons learned about creating a successful community through a mix of uses within walking distance is carefully considered in developing a new anchor on the North Campus. The North Campus has long been identified as a great asset to UCCS and Colorado Springs region. With a significant portion of the site located within the Urban Renewal Zone along North Nevada Avenue, university development will complement commercial development at University Village Colorado to create a college town district. By providing public university functions along this important corridor, UCCS will take advantage of partnership opportunities and enhance their presence in the cultural life of the City of Colorado Springs.



A series of districts connected along a spine links the Core Campus to North Nevada Avenue.

Connect Campus Destinations

As the university expands into the North and East Campuses, the connections between new facilities and the Core Campus will be enhanced. An extension of the pedestrian spine connects campus anchors, but as academic functions move outside of a ten-minute walking distance, the concept of the spine must expand to include transit and bicycles as well. While each of these three modes will travel the same general path across campus, each needs specific infrastructure that can be incompatible in certain locations. In some situations, pedestrian paths will separate from transit and bicycle routes, while at times their routes will run parallel to one another.

The concept of the spine will unify the campus but manifest a unique character in each campus district. The character of the spine responds to different uses and landscape adjacent to it. In each district, nodes of activity will serve as landmarks along the spine.

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Campus Organization & Capacity

CAMPUS ORGANIZATION

The physical constraints of university land ownership and topography dictate that as the campus grows, all its critical functions cannot be accommodated within walking distance of one another. Strategic organization of academic, residential, and recreational uses on campus is important to ensuring its functionality, with the relationship of academic uses to one another bearing heavily on class change times. Participants in the Master Plan Open House were challenged to create a plan that addressed campus organization while accommodating facilities for 20,000 students. Groups generated many interesting strategies, which are fully documented in the appendix. Three themes emerged as the most promising and impactful to the organization of the Master Plan.



The pedestrian spine is an organizing element on the Core Campus that can extend as the campus grows.

Campus Center Shifts North

Some groups felt that the increased activity along North Nevada would shift the perceived “center” of campus towards the north. As a result, new academic and housing developments were located between the Core Campus and the North Nevada Avenue edge to activate the connection between the two. Athletics and parking were located towards the north and east edges in these schemes.



Proposed organization creating a second core along North Nevada.

Campus Center Shifts East

Some groups felt that the East Campus holds the greatest development potential and could become a unified extension of the existing core, while the North Campus is better suited for specialized, satellite functions. These groups chose a dense concentration of development in the Core Campus. Housing, parking, athletics, and recreation were all located on the North Campus to preserve the core as a walkable academic district.



Proposed organization using the East Campus to expand the Core.

Mixed-use Campus

Inspired by the mix of uses in the Core Campus today, some groups chose to create a mixed-use district along the length of the spine. In these scenarios, living-learning clusters with associated recreation and parking facilities were proposed.



Proposed organization mixing residential, academic, and recreation.

CAMPUS CAPACITY

To determine the capacity of the university's existing real estate holdings, development options for each precinct of the campus were studied. While some ideas were rejected immediately, others resonated with the campus community. Ultimately, these initial studies were the origination of many of the Master Plan components, with each idea evolving between initial testing and the final plan.

Core Campus

With the design of two additional Summit Village residence halls underway, the Core Campus feels nearly built out, with the exception of the parking lots lining the front edge of the campus adjacent to Austin Bluffs Parkway. While developing the parking lots would provide valuable land for new academic facilities within the Core, the cost of replacing the parking might be prohibitively expensive. One early design scenario for the Core Campus assumed that its full capacity includes only one additional building site and retains the parking lots. In this scenario, circulation within the parking lots would be clarified to create a regularized street as part of the vehicle and bicycle spine.

A second early design scenario proposed a parking structure at the eastern edge of the Core Campus that would free the parking lots for new academic facilities. Massing of new buildings would be limited in height to preserve views from existing buildings and the spine. While many members of the campus community felt that surface parking in the core detracts from the campus' aesthetic appeal, new development in the Core was anticipated to be a very long-term solution.



Early sketch showing Core Campus surface parking remaining.



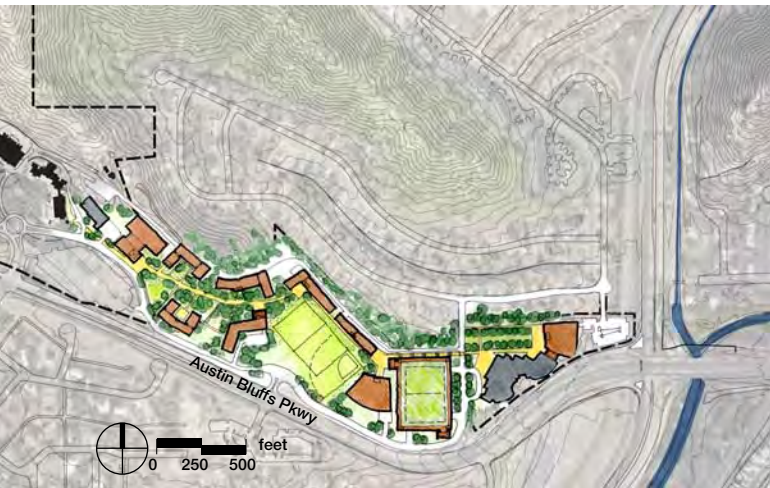
Early sketch exploring potential capacity of parking lots for development.



Early sketch showing a residential and academic district.

East Campus Capacity

The East Campus Concept Master Plan shows an extension of the pedestrian spine connecting the Core Campus to University Hall. While this framework could accommodate academic or residential facilities, it anticipates a residential village closer to the existing core and new academic buildings clustered towards University Hall to the east. Due to the desire to significantly increase the percentage of students living on campus, a second initial study explored the East Campus as an entirely residential village with an integrated soccer field for recreational use. In this scenario, University Hall would be best used for support functions.



Early sketch exploring residence halls and recreation on the East Campus.

Easy access to the Core Campus, reducing University Hall's academic isolation, providing an academic east end anchor like Columbine Hall's Core Campus western end anchor, and limited sanitary sewer capacity for housing led the university community to prefer a mix of residential and academic development on this site.

Alpine Village and the “Mesa”

Preliminary capacity studies for this area identified the opportunity for a node of new development around the Recreation Center and Alpine Village to mark the transition from Core Campus to North Campus. Significant erosion at the top of the southernmost arroyo has created a site that would accommodate a structured parking facility. Due to its proximity to the Recreation Center, this would be an opportunity to enhance recreational facilities by building an artificial turf field on the top level of the garage. New development in this area could accommodate residential or academic development. Ultimately, the anticipated need for housing to meet targets for students living on campus, the proximity of recreation facilities, and the available sanitary sewer capacity suggested that these areas would be best suited for residential uses.

Conceptual sketches for a new village on the flat “mesa” between Alpine Village and North Nevada could accommodate a wide range of uses, but the native landscape, cultural resources, and views of Pulpit Rock and the Front Range in this district present unique development opportunities to integrate educational landscapes into the built environment.



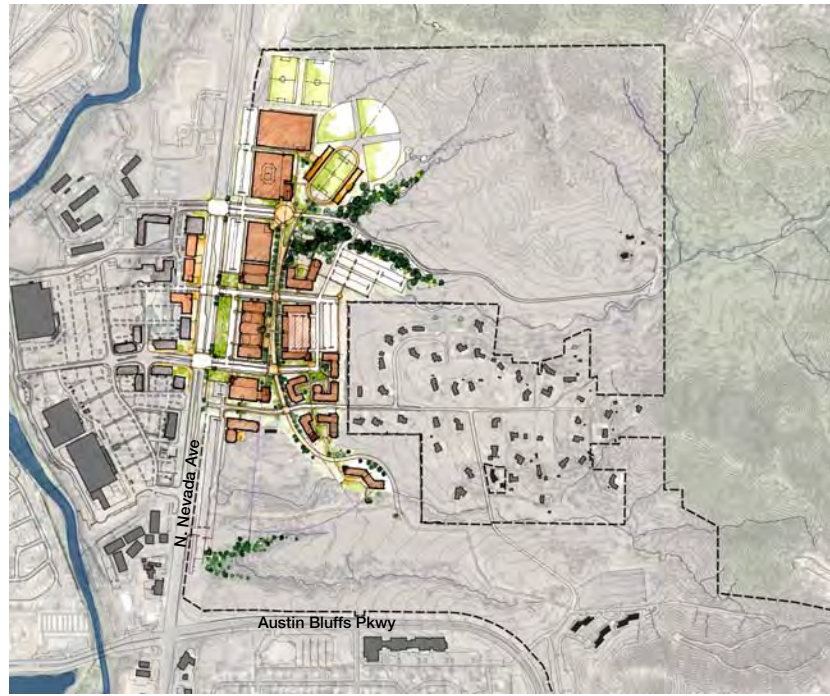
Early sketch shows buildings framing courtyards along the Mesa.



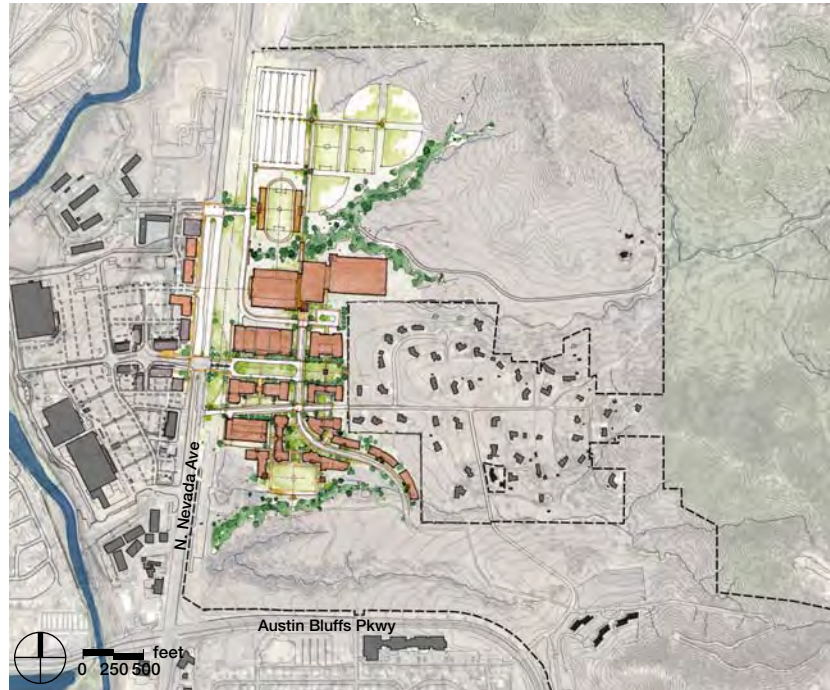
Early sketch explores residential expansion of Alpine Village.

North Nevada

Three different concepts explored the development capacity of the North Nevada edge. To give the character of a traditional college town, a main street lined with active uses along the pedestrian spine was envisioned. A grid of development that frames views of Pulpit Rock and Pikes Peak shaped a second scenario. To give the North Nevada edge a campus character, a third sketch clustered development around a central green. In each of the three scenarios, the major athletics facilities were clustered differently. Based on feedback about ideal programmatic adjacencies, a fourth preliminary design arranged athletics facilities along an extension of the pedestrian spine aligned with Pulpit Rock. Components of each of these schemes are incorporated into the Master Plan.



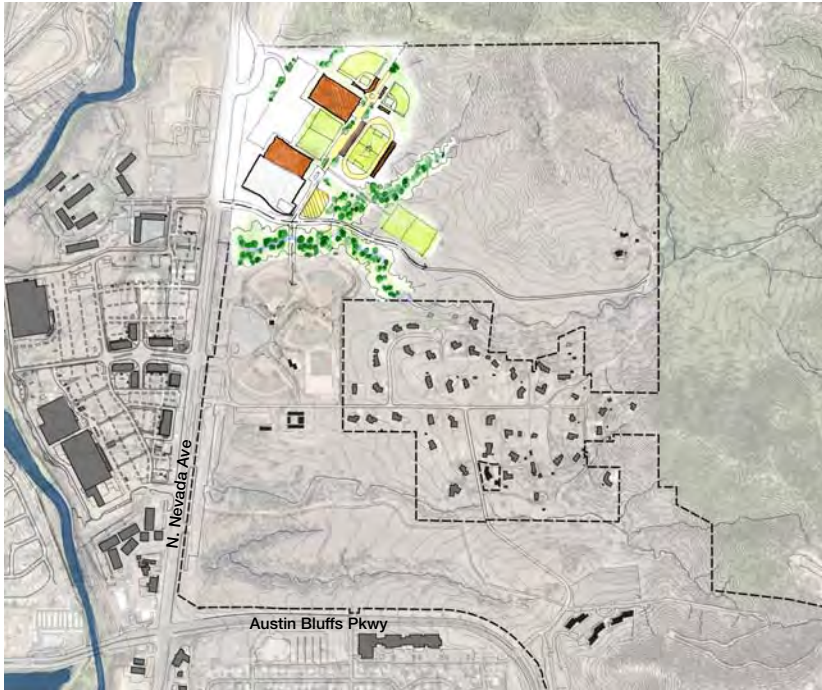
Early sketch organizing North Nevada around a "main street."



Early sketch exploring a campus green.



Early sketch using new buildings to frame views of Pikes Peak.

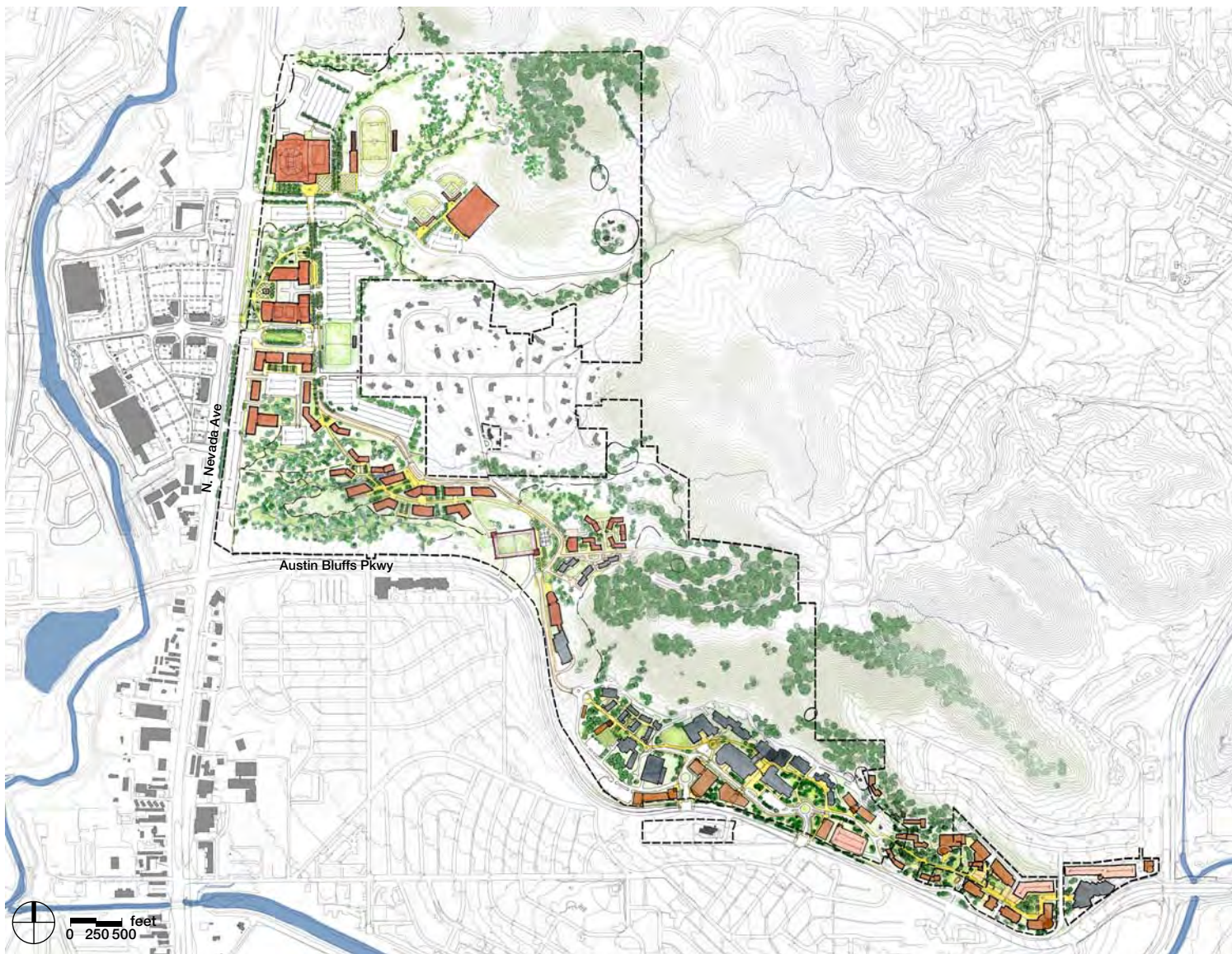


Early sketch aligning athletic facilities on axis with Pulpit Rock.

STUDENT ENROLLMENT CAPACITY

Combining the capacity studies for each district into a campus-wide Draft Plan helped establish the enrollment capacity of the campus. Using the assumptions that most new buildings will be four stories, the Draft Plan shows potential for about 4,000,000 GSF plus 4,500 beds; this number is inclusive of the 1,700,000 GSF of existing space on campus. This amount of development would accommodate the residence halls, academic, student life and parking needs of a student body of 20,000 to 23,000 students using state utilization guidelines.

	ENROLLMENT	ACADEMIC & STUDENT LIFE				HOUSING		PARKING	
	On-Campus Student Headcount	Academic GSF	Student Life GSF	Total GSF (exclusive of housing)	Difference From Existing	Beds	Difference From Existing	Parking	Difference From Existing
Fall 2011 Existing	9,321	1,116,941	285,513	1,403,454	—	900	—	3,350	—
Fall 2011 Guideline	9,321	1,232,000	606,000	1,838,000	434,546	1,491	591	3,728	378
2020	13,000	1,594,000	665,000	2,259,000	855,546	2,400	1,500	5,200	1,850
	15,000	1,825,000	752,000	2,577,000	1,173,546	2,700	1,800	6,000	2,650
	20,000	2,369,000	939,000	3,308,000	1,904,546	3,600	2,700	8,000	4,650
	25,000	3,125,000	1,149,000	4,274,000	2,870,546	4,500	3,600	10,000	6,650



When combined, capacity studies for each precinct inform projections of feasible enrollment growth.

